#### STIC-Biotech/ChemLib

82028

From: Sent: To: Subject:



Salimi, Ali Tuesday, December 10, 2002 1:52 PM STIC-Biotech/ChemLib 09/701,080

Can you please conduct a search for the application serial no. 09/701,080, including interference search for the following sequences:

SEQ ID NO: 1, and 18

Thanks!

Ali Salimi AU 1648 Room 9D07 Mailbox 8E12 Edward Hart
Technical Info. Specialist
STIC/Biotech
CMI 6B02 Tel: 305-9203

Searcher:
Phone:
Location:
Date Picked Up: 13/20
Date Completed: 1913/10
Searcher Prep/Review:
Clerical:
Online time:

TYPE OF SEARCH:	
NA Sequences:	
AA Sequences:	_
Structures:	
Bibliographic:	
Litigation:	
Full text:	
Patent Family:	
Other:	

VENDOR/COST (where a	pplic.)
STN:	
◆ DIALOG:	
Questel/Orbit:	
DRLink:	
Lexis/Nexis:	
Sequence Sys.:	<u> </u>
WWW/Internet:	
Other (specify):	

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Dec. 13 09:02:58 2002
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Title:
Perfect score:
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Total number of hits satisfying chosen parameters:
                                                Searched:
                                                                                                                                                                                                                                                                                   Run on:
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                                                                                                                                                                         US-09-701-080C-18
851
                                            262574 seqs,
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                                                                                      Gapop 10.0 , Gapext 0.5
                                                                                                                                                 MFQDPQERPRKLPQLCTELQ......WTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd.
                                              29422922 residues
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208.519 Million cell updates/sec
    262574
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Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Issued\_Patents\_AA:\* /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6A\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

24 25 26 27	19 20 21 23	14 15 16	10 11 12 13	4 N O C & C	321	Result
163 120 115 115	469.5 469.5 320 320 320 320	469.5 469.5 469.5	539 539 487 487	84888888888888888888888888888888888888	843 843	Score
19.2 14.1 13.5 13.5	37.66 37.66			99.1 99.1 99.1	99.1 99.1 99.1 99.1	Query Match
30 21 20 21	278 383 368 375 465 1587	182 158 158 271	162 172 172 172 172	266 273 292 371	162 266 266	Length
2221	44444	1 3 2 1	4 2 4 2 4	4444	431	DB
-363-586-4 -934-915-1 -934-915-1 -934-915-1	US-09-485-885-21 US-09-485-885-23 US-09-000-094-20 US-09-000-094-22 US-09-000-094-24 US-09-000-094-46	-117-083-1 -247-904B- -767-942A- -117-083-1	US-08-316-239B-4 US-08-860-165-12 US-09-359-382-12 US-08-860-165-14 US-09-359-382-14	-09-	US-08-316-239B-3 US-08-860-165-10 US-09-359-382-10	ID
	Sequence 21, Appl Sequence 23, Appl Sequence 20, Appl Sequence 22, Appl Sequence 24, Appl Sequence 46, Appl	10,	12, 12, 14, 14,	1, 7 4, 7 10, 6, 7	Sequence 3, Appli Sequence 10, Appl Sequence 10, Appl	Description

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1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60

0,;

Mismatches

Indels

0;

Gaps

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## ALIGNMENTS

RESULT 1 US-08-316-239B-3

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US-08-316-239B-3
Query Match
Best Local Similarity 99.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IDM PC COMPUTER: IDM PC COMPATIBLE
COMPUTER: IDM PC COMPUTER: IDM PC COMPUTER: IDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (703) 803-9387 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                     TOPOLOGY: no:
MOLECULE TYPE:
HYPOTHETICAL: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Jagttani, Ajay A. 205
REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UNI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 6120 CTTY: Centreville
                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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20120-3400
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6126 Rocky Way Court
                                                                                                                                                                                                                                                                                                                                                                                                                                     162 amino acids
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Parmenter, Cheryl A.
Parmenter, Cheryl A.
VENTION: Methods and a Diagnostic Aid for
VENTION: Distinguishing a Subset of HPV that is Associated with
VENTION: Increased Risk of Developing Cervical Dysplasia and
                                                                                                                                                                                                                                                                                                                    not relevant
                                                                                                                                                                                                                        protein
NO
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99.3%;
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                                                                      Score 843; DB 1;
Pred. No. 2.8e-82;
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                                                                                                                                                                                                                                                                                            US-09-359-382-10
                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling Jchn
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling Jchn
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Ellzabeth Ann
APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                       Patent No. 6306397
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Patent No. 6004557
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Best Local Similarity
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LENGTH: 266
CURRENT PILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: US/09/359,382
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCI/AU95/00868
EARLIER FILING DATE: 1995-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                     TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS FILE REFERENCE: 017227/0148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 17227/130

CURRENT APPLICATION NUMBER: US/08/860,165A

CURRENT FILING DATE: 1997-09-22

EARLIER APPLICATION NUMBER: PCT/AU95/00868

EARLIER FILING DATE: 1995-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -08-860-165-10
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EARLIER APPLICATION NUMBER: AU PN0157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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99.3%;
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RESULT 5 US-09-485-885-4

Sequence 4, Application US/09485885 Patent No. 6342224

GENERAL INFORMATION:

APPLICANT: Bruck, Claudine

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; LENGTH: 266
; CRQANISM: Human papillomavirus type
US-09-367-309A-1
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TYPE: PRT
; ORCANISM: Human papillomavirus type
US-09-359-382-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-367-309A-1
                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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                                                                                                                                                                                                         Matches 150;
                                                                                                                                                                                                                        Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/367,309A
CURRENT FILING DATE: 1999-08-11
PRIOR APPLICATION NUMBER: PCT/AU98/00080
PRIOR FILING DATE: 1998-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: MACFARLAN, RODERICK I.
APPLICANT: MALLIAROS, JIM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: AU PO 5178 PRIOR FILING DATE: 1997-02-19
 128
                 121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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Pred. No. 4.9e-82;
0; Mismatches 1
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Pred. No. 4.9e-82;
 158
                                                                                                                                                                                                                                        Length 266;
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FILE REFERENCE:

B45107

APPLICANT: Delisse, Anne-Marie Eva Fernande APPLICANT: Gerard, Catherine Marie Ghislaine APPLICANT: Lombardo-Bencheikh, Angela TITLE OF INVENTION: Yaccine

Cabezon Silva, Teresa

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapien US-09-485-885-4
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                                                                                                                                                              ; ORGANISM: Homo sapier US-09-485-885-10
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Best Local Similarity
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SEQ ID NO 4
                                                                                                        Matches 150;
                                                                                                                    Query Match
Best Local Similarity
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PRIOR TILING DATE: 1998-00-1,
PRIOR APPLICATION NUMBER: GB 9
PRIOR APPLICATION DATE: 1997-08-22
                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILLING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: GB PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
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CURRENT FILING DATE: 2000-02-18
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                                                                                                                                                                                            TYPE: PRT
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TYPE: PRT
                                                                                                                                                                                                          LENGTH: 292
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                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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Cabezon Silva, J
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                                                                                                      Conservative
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99.3%;
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Pred. No. 5e-82;
0; Mismatches
                                                                                                                    Score 843; DB 4;
Pred. No. 5.4e-82;
                                                                                                      Mismatches
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LENGTH: 371
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SEQ ID NO 14
LENGTH: 390
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Patent No. 6342224
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                                                                                                                                   TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
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PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9
PRIOR FILING DATE: 1997-08-22
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CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
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                                              PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS:
                                                                                                  PRIOR APPLICATION NUMBER: PCT PRIOR FILING DATE: 1998-08-17
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                                   SOFTWARE:
                                                                  PRIOR APPLICATION NUMBER: GB 9 PRIOR FILING DATE: 1997-08-22
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ORGANISM: Homo sapien
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Gerard, Catherine Marie Ghislaine
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Gerard, Catherine Marie Ghislaine
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99.3%;
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                                                                                      GB 9717953.5
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US-08-316-239B-4
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                                                            Matches
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                                                                          Query Match
Best Local (
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                                                                                                                                               STRANDEDNESS:
TOPOLOGY: not
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UN
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                          TELEPHONE:
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Jagtiani, Ajay A.
TWO NUMBER: 35,205
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                                                                                                                                                                                                             162 amino acids
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6126 Rocky Way Court
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VENTION: Methods and a Diagnostic Aid for
VENTION: Distinguishing a Subset of HPV that is Associated with an
VENTION: Increased Risk of Developing Cervical Dysplasia and
VENTION: Cervical Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wheeler, Cosette M.
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98.7%;
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                                                        Score 840; DE Pred. No. 5.8e
1; Mismatches
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Pred. No. 7.5e-82;
0; Mismatches 1
                                                                        DB 1;
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                                                                        CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1994-12-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12, Application US/08860165A Patent No. 6004557 GENERAL INFORMATION:
                 SOFTWARE: PatentIn Ver. SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 6306397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 94; Conserv
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CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1994-12-20
                                                                                                                                                                                                                                               TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS FILE REFERENCE: 017227/0148
                                                                                                                                                                                                                                                                                     APPLICANT: COX, John Cooper APPLICANT: WEBB, Elizabeth Ann APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: WEBB, Elizabeth Ann APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: EDWARDS, Stirling John APPLICANT: COX, John Cooper
                                                         NUMBER OF SEQ ID NOS: 27
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ORGANISM: Artificial Sequence
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LENGTH: 172
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98.9%;
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Pred. No. 5.
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.9e-50;
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Patent NO. USCALLANTE OF PATENT NO PAPELICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
TABLIER APPLICATION NUMBER: US 08/860,165
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US-09-359-382-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 14
LENGTH: 172
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APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZEK, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
                                                                                                                                                                                                                                                                Sequence 14, Application US/09359382 Patent No. 6306397
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Patent No. 6004557
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PN0157
EARLIER FILING DATE: 1994-12-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence
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93.5%;
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Pred. No. 5.
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Pred. No. 2e-44;
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US-08-117-083-10
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-- rocal Similarity
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Patent No. 5719054
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
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                                                                                                                                                                                                      TELEFAX: 415-398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08,
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1994-12-20
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TYPE: PRT
                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: A-TELECOMMUNICATION INFORMATION: 415-781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: RECOMDINGNITIES OF INVENTION: Papilloma 70 CFOURNCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Boursnell, Michael APPLICANT: Inglis, Stephen C. APPLICANT: Munro, Alan J.
                                                                                     FEATURE:
                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                                                    MOLECULE TYPE:
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              LOCATION: 1.182
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                  STRANDEDNESS: single TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 136
                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                    NAME/KEY:
                                                                                                                                                                                                                                                        TELEPHONE:
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                                                                                                                                                                                                                                                                                                     AGENT INCLUDED A PROPERTY WITH BER: 24,190
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                                                                                                                                                : 182 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CA
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                                                                    Protein
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                                                                                                  protein
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93.5%;
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              /note= "Xaa refers to stop codon in the open reading frame." \label{eq:final_condition}
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co Center,
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Pred. No. 2e-44;
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Query Match

56.3%;

Score 479;

DB 1;

Length 182;

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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-247-904B-10
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US-08-247-904B-10
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NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MIV-029.01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-1000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
FRANCE CHARACTERISTICS:
                                                                                                                                                                                                         Query Match 55.2%; Score 469.5; DB 2; Length 158; Best Local Similarity 56.1%; Pred. No. 1.3e-42; Matches 87; Conservative 22; Mismatches 41; Indels 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Application US/08247904B Patent No. 5981699
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 62.2%; Matches 97; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/247,904B
FILING DATE: 23-MAY-1994
CLASSIFICATION: 530
NUMBER: NEW TOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley, Hoag & Eliot
STREET: One Post Office Square
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APPLICANT: Eckstein, Jens W.
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: Human Ubiquitin Conjugating Enzyme
NUMBER OF SEQUENCES: 17
                  122 KQRFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
124 KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV 158
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                                                                61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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5: Mismatches 8;
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Search completed: December 13, 2002, 08:45:20 Job time: 22.3067 secs

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RESULT 15
AAY25381
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Best Local
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Chimeric -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-AUG-1998;
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Fusion protein;
                     HPV fusion protein CLYTA-E6E7-His/HPV16.
                                              06-SEP-1999
                                                                    AAY25381;
                                                                                          AAY25381 standard; Protein;
                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                          malignant) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 6; 95pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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DB; AAX29782.
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Haemophilus influenzae
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                                                                                                                                                                                                                                                                                                                                                          preventing HPV viral infection.
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protein;
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No. 2.7e-82;
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immunomodulator; tumour;
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                                                                                                                                                                                                                                                                                                                   AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein fron HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CPG oligonucleotide. The products of the invention can be used to induce a immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
Human papillomavirus
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RESULT 12
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                                                                                                                                                                                                                                                                   Sequence
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Chimeric - Streptococcus pneumoniae.
                                                                                                                                                                                                                                                                                                               or malignant) and preventing HPV viral infection
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                                                                                                                                                                                                                                                                   292 AA;
                                                                                                                                                                      Conservative
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on; benign; m
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99.38;
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                                                                                                                                                                                          Score 843; DB 20;
Pred. No. 2.1e-82;
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Pred. No. 2.1e-82;
                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CMG;
                                                                                                                                                                                                                Length
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                                                                                                                                                                      Indels
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                                                                                                                                    Matches
                                                                                                                                                         Query Match
                                                                                                                                                                                                 AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce a immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours.
                                                                                                                                                                                                                                                                                                               Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-405485/34.
N-PSDB; AAX78793.
                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                  Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPV antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fusion protein; E6 primmunological fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPV fusion protein D1/3-E6E7-His/HPV16
                                                                                                                                                                                                                                                                                           Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-1998;
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                                                      61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                            Local
                                                                                                  1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                          AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                       MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                   150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 papillomavirus
                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                        SMITHKLINE BEECHAM
                                                                                                                                                                                                                                                                                         III; Page 50; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; Protein;
                                                                                                                                                                               371 AA;
                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  I fusion partner; CpG c prevention; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                  Gerard CMG
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                                                                                                                                   Score 843; DB 20;
Pred. No. 2.7e-82;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                           E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 protein; E6/E7; imm
CpG oligonucleotide;
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                                                                                                                                                                                                                                                                                                                           fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunomodulator; tumour;
                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                       Length 371;
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RESULT 14 AAY02633

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RESULT 10
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ID AAY02632
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DT 22-JU
XX Chime
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KW tumou
XX Chime
XX WO991
XX W0991
XX I7-AU
XX I8-AU
PR 22-AU
XX X I8-AU
PR WPI;
DR WPI;
DR WPI;
DR WPI;
DR WPI;
XX Human
PT Human
PX Human
PX
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Chimeric -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Composition comprising
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This sequence represents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimeric;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        constructs comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX78791-X78801
                                       Disclosure;
                                                                        Human Papilloma Virus (HPV) treatment or prophylaxis of
                                                                                                                                                                                                 Lombardo-Bencheikh A;
                                                                                                                                                                                                                    Bruck C,
                                                                                                                                                                                                                                                             (SMIK)
                                                                                                                                                                                                                                                                                                     22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                        17-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                       WO9910375-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prot.D1/3-E6-His/HPV16 protein.
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DB; AAX78792.
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                                                                                                                                                           1999-190587/16
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                                                                                                                                         AAX29781
                                                                                                                                                                                                                                                           SMITHKLINE BEECHAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lesion;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ε6;
                                                                                                                                                                                                                    Cabezon Silva T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus. Haemophilus influenza
                                     Fig 3; 95pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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malignant;
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chimeric
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HPV induced les:
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Pred. No. 1.9e-82;
0; Mismatches 1.
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E6
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or
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infection.
E7
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    useful

protein
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E6/E7
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein from Human papillomavirus (HPV) linked to an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection.
                                   AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein fro HPV (represented in AAX25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce immune response in a patient to an HPV antigen. They can also be used
                                                                                                                                                                                                                                                                                                                                                                                                         Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                  Composition comprising induce immune response
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                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                            HPV fusion protein CLYTA-E6-His/HPV16
                                                                                                                         Example VI; Page 52-53;
                                                                                                                                                                                                                                               (SMIK ) SMITHKLINE BEECHAM
                                                                                                                                                                                                                                                                          24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus
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DB; AAX78795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                         WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 273 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                          ç
                                                                                                                                                                                                                         Gerard
                                                                                                                                                                                                                                                                          97GB-0027262
                                                                                                                                                                                                                                                                                                 98WO-EP08563
                          treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.1%;
                                                                                                                                                                                                                         CMG
                                                                                                                                                   an
to
                                                                                                                         62pp; English.
                                                                                                                                                   E6,
                                                                                                                                                                                                                                                  BIOLOGICALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 843;
Pred. No. 1
                                                                                                                                                             E7
                          induced
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                                                                                                                                                             or
                                                                                                                                                             E6/E7
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.9e-82;
                                                                                                                                                              fusion
                                                                                                                                                             protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273;
                                                                                                                                                              from
                                                              optionally
ulatory CpG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                       be used
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RESULT 8
AAR97561
ID AAR9
XX AAR9
AC AAR9
XX Huma
XX Huma
XX Huma
XX Huma
XX Huma
XX W OACC
XX Huma
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XX W 20-1
XX X 20-1
XX X
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The fragment of DNA contg. the HPV-16 E6/E7 coding region was prepd. by PCR from plasmid pBR322/HPV16 (Durst et al., PNAS, 80: 3812 (1983)) using oligonucleotides SO5 and SO6. The prod. of the third reading frame is the EFV-16 E6 protein whereas the second reading frame encodes HPV-16 E7. The E6 and E7 ORFs are fused together to form a single continuous ORF via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-16 E6/E7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use immunotherapeutically to activate cells of the immune system against HPV. See also AAR27723-43.
                                                                                                                                                                Human papilloma virus; E6; 187; deletion mutant; HPV; immune response; humoral immune response; cellular immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Recombinant virus vectors encoding human papillomavirus proteins - for treating and vaccinating against HPV infections and
               20-DEC-1994;
                                                                     27-JUN-1996
                                                                                                                     Human papilloma
                                                                                                                                                     vaccine.
                                                                                                                                                                                                      Human papilloma virus E6/E7 protein variant.
                                                                                                                                                                                                                                   11-JAN-1997
                                                                                                                                                                                                                                                                                       AAR97561 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig la; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            conditions caused by them, such as cervical cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Boursnell MEG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-MAR-1991;
                                         20-DEC-1995;
                                                                                               W09619496-A1
                                                                                                                                                                                                                                                                                                                                                              129
                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                                                                AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                 (first entry)
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               94AU-0000157
                                          95WO-AU00868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 843; DB 13;
Pred. No. 1.8e-82;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 263;
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                                                                                                                                                                response;
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              Dalemans WLJ,
                                       (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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RRESULT 9
AAX25376
ID AAX2
XX
AAX25376
AC AAX2
XX
DT 06-S
XX
DT 06-S
XX
FUSI
HPV
XX
XX
Synt
COS Humau
KW HPV
COS Huma
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W099
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W099
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W099
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W099
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W6

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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A variant of the human papilloma virus (HPV) E6 or E7 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a deletion mutant comprising at least half, and preferably two-thirds of full length E6 or E7 protein starting from the N- or C-terminal, or is a full length E6 molety fused to a full length E7 molety. The variant optionally has a linkage molety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence is a full length E6/E7 fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or prevent HPV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1996-309518/31.
N-PSDB; AAT31833.
                                                                                                                                                                                                                                                             08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPV fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY25376 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 15-16; 37pp; English.
                                                                                                                                               24-DEC-1997;
                                                                                                                                                                                                     18-DEC-1998;
                                                                                                                                                                                                                                                                                                                      WO9933868-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY25376;
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(UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein D1/3-E6-His/HPV16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               prevention; treatment.
                                                                                                                                               97GB-0027262
                                                                                                                                                                                                     98WO-EP08563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99.1%;
99.3%;
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Pred. No. 1.8e-82;
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Gerard CMG

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RESULT 6
ARRESULT 8
ARRESULT 8
ID ARRESULT 8
AC AARRESULT 28-C
XX
ARRESULT 8
AC AARRESULT 28-C
XX
ARRESULT 8
AC AARRESULT 6
AC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methods have been developed for distinguishing a subset of human CC papilloma virus (HPV) that is associated with an increased risk of CC papilloma virus (HPV) that is associated with an increased risk of CC developing cervical dysplasia or cervical cancer. The methods involve: CC (1) preparing a cervical sample to expose any HPV-16 E6 gene in the CC sample and determining if the base at position 350 of the E6 gene in the CC (see AAT94723 and AAT94724 for comparison) is T or G, where the presence CC of G at position 350 is associated with an increased risk of developing CC cervical dysplasia or cervical cancer; and (2) preparing a cervical sample to expose any HPV-16 E6 protein in the sample and determining CC AAM35741 and AAW35742 for comparison) is Val or Leu, where the presence CC of Val at position 83 that is associated with an increased risk of CC developing cervical dysplasia or cervical cancer. The presence CC represents the reference protein sequence for HPV-16 E6. The 350G CC variant correlates well with Pap scores: 350T:350G ratios among 45 CC HPV16 samples were 10:4 for negative Pap scores; 4:2 for CIN I, 1:6 for CCN II; 2:9 for CIN III; 0:3 for cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
  Protein
                                                      Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
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28-SEP-1993;
                                                                                                                                  Human
                                                                                                                                                                                                           HPV; HPV16; E6
                                                                                                                                                                                                                                                                                                                  28-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                      AAR63865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       detecting variant form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Evaluating risk of cervical dysplasia or cervical cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Parmenter CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-SEP-1993;
                                                                                                                                                                                     cervix cancer.
                                                                                                                                                                                                                                                               HPV16 E6/E7
                                                                                                                                                                                                                                                                                                                                                                                                                    AAR63865 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYNE-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MFQDPQERPRKLPQLCTELQTT1HDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEXQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 158
                                                                                                                               papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7; Column 23-24; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                162 AA;
                                                                                                                                                                                                                                                            proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NEW MEXICO STATE
                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wheeler
                                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94US-0316239.
93US-0127906.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93US-0127906
     /label= E6_protein
159..188
                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.1%;
99.3%;
                                                                                                                                  strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GK.
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                                                                                                                                                                                                           E7
                                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                                                                                                       188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 843; DB 1
Pred. No. 1e-82;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       À
                                                                                                                                                                                                           diagnosis; cervical dyplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               þу
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
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RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequences of the E6 and E7 polypeptide-encoding regions of humopapillomavirus (HPV) 16 and 18 are given in AAQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis; expression of E6 and E7 is diagnostic for cervical cancer or pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papilloma virus de self sustained sequence detector probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-006821/01.
P-PSDB; AAQ75470.
  10-MAR-1992;
                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                          Virus vector; amplification;
                                                                                                                                                                                                                                                                                                                                                                                       HPV 16
                                                                                                                                                                                                                                                                                                                                                                                                                                          09-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR27725;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR27725 standard; Protein; 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 24-26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-NOV-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9426934-A
                                                   01-OCT-1992
                                                                                                   WO9216636-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BAXT ) BAXTER DIAGNOSTICS INC
                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         150;
                                                                                                                                                                                                                                                         papillomavirus 16
                                                                                                                                                                                                                                                                                                                                                                               E6 protein fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                       vaccinia virus; papillomavirus;
; immunotherapeutic.
92WO-GB00424.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93US-0058920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94WO-US05085
                                                                                                                                                      /note= "HPV-16 E6 protein'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /label= E7_protein
                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.1%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 detection assay -
ce replication and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 843; DB 16;
Pred. No. 1.2e-82;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    by amplification using hybridisation with a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16;
                                                                                                                                                                                                                                                                                                                                    HPV; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ions of human and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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Best Local S
Matches 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prophylaxis of a disease caused or exacerbated by MPV (mammalian papillomavirus) comprising a compound capable of reducing, inhibit or or otherwise decreasing the activity of a protein encoded by an MI gene by facilitating disruption of a chelated metal cation domain present in the protein. An agent of the present invention can be not treat cervical cancer or its HPV associated precursor lesions of the HPV associated cancers and/or warts. The present sequence represents a human papillomavirus E6 protein containing two zince finger motifs, as given in the exemplification of the present
          WPI; 2001-381497/40
                               Sette A,
                                                       (EPIM-)
                                                                            10-DEC-1999;
15-AUG-2000;
                                                                                                             11-DEC-2000; 2000WO-US33549
                                                                                                                                    14-JUN-2001
                                                                                                                                                           WO200141799-A1
                                                                                                                                                                                Human papillomavirus
                                                                                                                                                                                                      neoplastic growth; antiviral.
                                                                                                                                                                                                                 Human papillomavirus;
HPV; epitope; T cell;
                                                                                                                                                                                                                                                 Human papillomavirus protein HPV16
                                                                                                                                                                                                                                                                        22-AUG-2001
                                                                                                                                                                                                                                                                                               AAB98420;
                                                                                                                                                                                                                                                                                                                    AAB98420 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an agent used in the treatment or prophylaxis of a disease caused or exacerbated by MPV (mammallan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polysulfide and dithionodisulfide agents, useful for the treatment or prophylaxis of diseases caused by mammalian papillomavirus, are disruptors of a chelated metal cation domain in an MPV gene encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                    AVCDKCLKFYSKISEYRHYCYSL%GTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                       EPIMMUNE INC
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                               Sidney J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                           2000US-0641528
                                                                                                                                                                                                                                                                      (first entry)
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                                                                                         99US-0172705
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78pp;
                                                                                                                                                                                                                                                                                                                     Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.1%;
                                Southwood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beerheide
                                                                                                                                                                                                                 human leukocyte identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                     158
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 843; DB 2
Pred. No. le-82;
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                                Chesnut
                                                                                                                                                                                                                                                 E6
                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                vantigen;
vaccine;
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                                                                                                                                                                                                                HLA; immune infection; q
                                Celis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 158;
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                               Ħ
                                                                                                                                                                                                                genital
                                                                                                                                                                                                               response;
genital wart;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            an MPV
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immunosuppressive epitopes that may be present in whole antigens can be avoided with the use of epitope-base vaccines. An additional advantage is the ability to combine selected epitopes (CTL and HTL) and to modify the composition of the epitopes achieving enhanced immunogenicity, the major benefit of the vaccine is that is safe and efficacious. AAB98391 to AAB98477 represent polypeptide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                    from the present invention are useful for stimulating an immune response to HPV by stimulating the production of CTL or HTL responses, specifically in the treatment or prophylaxis of HPV infection, in persons who have not manifested symptoms e.g. genital warts or neoplastic growth. The peptides can also be used in a tetramer staining assay to assess peripheral blood mononuclear cells for the presence of antigen-specific CTLs following exposure to a pathogen or immunogen, and as reagents to evaluate immune recall responses or evaluate the efficacy of a vaccine.
                                                                                                                                                                                                                                                    The vaccine compositions are useful for removing warts or treating HP infections. The epitopes for inclusion in an epitope-base vaccine may be selected from conserved regions of viral or tumour-associated antigens, which reduces the likelihood of escape mutants, also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HPV) epitope (I). (I) has antiviral activity, and can be used in vaccine production. Peptides and corresponding nucleic acid compositions
                                                   of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes an isolated prepared human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treating HPV infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    An isolated human papilloma virus (HPV) epitope, useful in vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page
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Query Match
Best Local
                                                                                                                                      Matches
                                                                                                                                                                                   Sequence
128
                     121
                                            89
                                                                 61
                                                                                          œ
                                                                                                               1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
          KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                        AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                      AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                      150;
                                                                                                                                                 Similarity
                                                                                                                                                                                    158
                                                                                                                                      Conservative
                                                                                                                                                                                    AA;
                                                                                                                                                99.1%;
99.3%;
                                                                                                                                      0,
                                                                                                                                                Score 843; DB 2
Pred. No. 1e-82;
                                                                                                                                     Mismatches
158
                                                                                                                                                           DB 22;
                                                                                                                                      1;
                                                                                                                                                            Length 158;
                                                                                                                                      Indels
                                                                                                                                      0;
                                                                                                                                     Gaps
                                            127
                                                                                        67
                                                                                                                                      0;
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invention

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RESULT 5
AAW35741
               Complete
                                     Human papillomavirus type 16 E6 protein.
                                                                                            AAW35741;
                                                                                                                     AAW35741 standard;
                                                                  16-FEB-1998
genome; cir
dysplasia;
                                                                  (first
             circular; human papillomavirus type
                                                                                                                       Protein;
  cervical
                                                                  entry)
                                                                                                                       162
  cancer;
                                                                                                                       A
  cervical smear
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Human

papillomavirus

type

16;

HPV16

Misc-difference

159

note=

"Mutated to Val "End of protein

/note=

residues

are sequence in the variant"

given

even following

though

amino

, on "

Misc-difference

Location/Qualifiers

21-OCT-1997 US5679509-A

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ID AAR22766 standard; [

XX AAR22766;

XX DAR22766;

XX DT 21-SEP-1992 (first

XX DE HPV E6 peptide.

XX Human; papillomaviru

KW Cancer.

XX Human; papillomaviru

KW Cancer.

XX PPN W09205248-A.

PPN W09205248-A.

XX PPN W09205248-A.

PPN W09205248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
AAR22766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             рЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a polypeptide comprising a CC transcriptional adaptor motif (TRAM) or a TRAM-interaction motif (TRAM) (I). (I) can be used for identifying compounds (II) comprising a CC polypeptide capable of disrupting an interaction between a TRAM sequence and/or a TRAM sequence. Polypeptides which bind to a TRAM sequence or a CC TRAM sequence are identified by incubating, the polypeptide with (I) and CC determining if the polypeptide interacts with (I). Compound (II) is conseived for preparing a pharmaceutical composition and for disrupting an interaction between TRAM sequence and TRAM sequence in vitro, thereby CC inhibiting vital transcription or cell cycle progression in mammalian CC cells especially cancer cell. Compounds which disrupt interaction between TRAM/TRAM containing polypeptides can be used therapeutically to Detween TRAM/TRAM containing polypeptides can be used therapeutically to crevent or treat viral diseases and tumours. The polypeptides reduce concluding appotosis and growth arrest and can be used to produce containing polypeptides can be used to produce antibodies against the TRIM or TRAM sequences. HPV types associated containing to E5 polypeptides to bind to creb binding protein containing protein cannot acid sequence. The present sequence represents a HPV-16 E6 protein contains acid sequence from an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR22766 standard; peptide; 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                (BRIM ) BRISTOL-MYERS SQUIB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        papillomavirus; immunogenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fig
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9;
                                                                                                                                                                                                                                                                                                            90US-0588384
                                                                                                                                                                                                                                                                                                                                                                                        91WO-US07081
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                                                                                                                                                        Hellstrom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
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                                                                                                                                                        Hellstrom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cervical; warts; carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             151
                                                                                                                                                ~
                                                                                                                                                    Hu
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                                                                                                                                                    ۲;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
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RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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NA PARK Y NA PAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The peptide is the sequence of the human papillomavirus HPV 16 E6 nucleoprotein. Peptides corresponding to regions (pref. epitopic regions) of HPV 16 E6 were synthesised by standard Merrifield synthesis. Examples of such peptides are E6 1-20, 8-20, 119-134 or 148-158. Compositions contg. these peptides, antibodies against the peptides, or recombinant cells contg. the gene encoding the immunogenic peptides may be utilised in methods for inhibiting and treating HPV infection and tumour initiation and progression e.g. in the prevention or retardation of cervical warts and cervical carcinoma resulting from HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chelated zinc finger; therapeutic; treatment; prophylaxis; MPV; mammalian papillomavirus; antiviral; cytostatic; cervical cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenic peptide(s) derived from E6 or E7 region of HPV16 and recombinant cells encoding them, useful in treatment and prophylaxis of cervical warts or cancer resulting from HPV
                                                                                                             04-SEP-1998;
15-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY82462;
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                                                                                                                                                                                                                                                                                                             WO200014063-A1
                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus E6 protein containing two zinc finger motifs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY82462 standard; Protein; 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                infection
                          (MOLE-) INST MOLECULAR & CELL BIOLOGY.
                                                                                                                                                                                               03-SEP-1999;
                                                                                                                                                                                                                                                        16-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                See also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lesion; wart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR22767.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                             98AU-0005733.
99AU-0001645.
                                                                                                                                                                                               99WO-AU00724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers 37..73
                                                                                                                                                                                                                                                                                                                                                                                               110..146
                                                                                                                                                                                                                                                                                                                                                                        /note=
                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "forms a zinc finger motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81pp; English.
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                                                                                                                                                                                                                                                                                                                                                                  "forms a zinc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 843; DB 13;
Pred. No. 1e-82;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        151
                                                                                                                                                                                                                                                                                                                                                                     finger motif"
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5.1.3

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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seq length: 2000000000
A_Geneseq_101002:*

1: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*
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9: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:*
10: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:*
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851
1 MFQDPQERPRKLPQI
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(c) 1993 - 2002
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344.760 Million cell updates/sec
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score is No. is the number of results predicted by chance to greater than or equal to the score of the result best derived by analysis of the total score distribution score distribution being printed, have

### SUMMARIES

Prot.D1/3-E6-His/H	AAY02632	20	273	99.1	843	10
HPV fusion protein	AAY25376	20	273	99.1	843	9
Human papilloma vi	AAR97561	17	266	99.1	843	80
HPV 16 E6 protein	AAR27725	13	263	99.1	843	7
HPV16 E6/E7 protei	AAR63865	16	188	99.1	843	0
Human papillomavir	AAW35741	18	162	99.1	843	ហ
Human papillomavir	AAB98420	22	158	99.1	843	4
Human papillomavir	AAY82462	21	158	99.1	843	ω
HPV E6 peptide. S	AAR22766	13	158	99.1	843	2
HPV-16 E6 protein	AAY57808	21	151	100.0	851	_
Description	ID	DB	Query Query Match Length DB	Query Match	Score	Result No.

## ALIGNMENTS

RRSULT 1
AAXY5708
IID AAXY5
XX AAY5
XX AAY5
XX AAY5
XX Tran
XX Tran
XX Creb
KW Cell
KW cell
KW vira
XX Vira
XX W099
XX AAY57808 standard; peptide; 151 AA HPV-16 E6 protein amino acid sequence. 20-MAR-2000 AAY57808; (first entry).

Transcriptional adapter motif; TRAM; TRAM interaction motif; TRIM; creb binding protein; transcriptional regulation; cytostatic; antiviral; cell cycle inhibitor; viral transcription inhibitor; cancer; tumour; viral disease; viral infection; cell cycle; apoptosis; growth arrest.

Human papillomavirus.

WO9961608-A2

02-DEC-1999

26-MAY-1999; 99WO-GB01668.

26-MAY-1998; 05-JAN-1999; 98GB-0011303. 99GB-0000157.

(MOLE-) INST MOLECULAR & CELL BIOLOGY

O'Connor MJ, Zimmermann Η;

WPI; 2000-072620/06

Novel polypeptides cells useful for treating viral disease and cancer

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Database
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Maximum DB
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Perfect score:
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                                                                                                                                                                  833
469.5
469.5
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851
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/cgn2_6/ptodata/1/paa/USOf_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO7_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO8_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO9_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO9_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO9_NEW_COMB.pep:*
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US-09-701-080C-18
US-09-581-976B-4
US-09-581-976B-10
US-09-581-976B-6
US-09-581-976B-21
US-09-581-976B-21
US-09-581-976B-21
US-09-581-976B-23
US-10-24-676-54549
US-09-724-676-54549
US-09-724-676-54544
US-09-724-676-54544
US-09-724-676-54544
US-09-724-676-54545
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US-09-724-676A-54543
US-09-724-676A-54543
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US-09-724-676A-54543
US-09-724-676A-54543
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US-09-724-676A-54544
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420.734 million cell updates/sec
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21, Appl
RESULT 2
US-09-581-976B-4
Sequence 4, Application US/09581976B
Sequence 1 INFORMATION:
GENERAL INFORMATION:
APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFRENCE: B45124
CURRENT APPLICATION NUMBER: US/09/581,976B
CURRENT FILING DATE: 2000-06-20
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US-09-701-080C-18
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Matches 1
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Sequence 54 Sequence 54		Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54	Sequence 54
54561, 54562,	54560,	54559,	54558,	54557,	54556,	54555,	54554,	54562,	54561,	54560,	54559,	54558,	54557,	54556,	54555,	54554,	54547,
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CURRENT APPLICATION NUMBER: US/09/701,080C
CURRENT FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: GB 9811303.8
PRIOR FILING DATE: 1998-05-26
PRIOR APPLICATION NUMBER: GB 9900157.0
PRIOR FILING DATE: 1999-01-05
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PATENTING PRIOR DATE: 1997-01-05
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PATENTING DATE: 1997-01-05
CORGANISM: Human papillomavirus
ORGANISM: Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION FILE REFERENCE: N73477C GCW
                       121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                             61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                         61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                            KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                            h 100.0%; Score 851; DB 5; Similarity 100.0%; Pred. No. 2.6e-84; 51; Conservative 0; Mismatches 0;
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US-09-581-976B-10
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                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 28 SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/581,976B CURRENT FILING DATE: 2000-06-20
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PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Chimaeric protein (protein D from Haemoplilus OTHER INFORMATION: influenza B and E6 from Human papilloma virus OTHER INFORMATION: 16)
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                                                                          61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                1 MFQDPQERPRKLPQLCTELQTTI3DIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Pred. No. 3.4e-83;
                                                                                                                                                                                                                      Score 843; DB 5;
Pred. No. 3.6e-83;
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                                                                                                                                                                                                                                                                                                         (Clyta from Streptococcus from Human papilloma virus
                    151
                                                                                                                                                                                                                                     Length 292;
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OTHER INFORMATION: Chimaeric protein (Clyta from Streptococcus OTHER INFORMATION: pneumoniae and E6E7 fusion from Human papil: OTHER INFORMATION: virus type 16) US-09-581-976B-14
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                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 14 LENGTH: 390
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APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
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Best Local :
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                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 2000-06-20 PRIOR APPLICATION NUMBER: PCT/EP98/08563 PRIOR FILING DATE: 1998-12-18
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: GB 9727262.9 PRIOR FILING DATE: 1997-12-24 NUMBER OF SEQ ID NOS: 28
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                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                              TYPE: PRT
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ORGANISM: Artificial Sequence
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Pred. No. 4.5e-83;
                      and E6E7 fusion from Human papilloma 16)
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US-10-177-390-6
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                                                                                                                                                                                                                                                                                                          Sequence 21, Application US/09581976B GENERAL INFORMATION:
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                                                      NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 21
LENGTH: 278
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Best Local Similarity
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APPLICANT: N.V. Antwerps Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021505wo/JH/ml
CURRENT APPLICATION NUMBER: US/10/177,390
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                                                                                                                                                                                                                                                      APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
                                                                                                                         PRIOR APPLICATION NUMBER: GB 9727262.9 PRIOR FILING DATE: 1997-12-24
                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/EP98/08563 PRIOR FILING DATE: 1998-12-18
                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/581,976B CURRENT FILING DATE: 2000-06-20
                                                                                                                                                                                                                                     FILE REFERENCE: B45124
                    TYPE: PRT
ORGANISM: Artificial
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US-09-581-976B-23
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                                                                                                      RESULT 9
US-10-240-851-107
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Sequence 107, Application US/10240851
GENERAL INFORMATION:
APPLICANT: John P. Carulli et al.
TITLE OF INVENTION: THE HIGH BONE MASS GENE
FILE REFERENCE: 032796-021
CURRENT APPLICATION NUMBER: US/10/240,851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FASTSEQ for Windows Version 3
SEQ ID NO 23
LENGTH: 383
TYPE: PRT
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Vaccine FILE REFERENCE: B45124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/EP98/08563 PRIOR FILING DATE: 1998-12-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                        175
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                                                                                                                                                                                                   | KQRFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
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87; Conserv
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Pred. No. 5.
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PRIOR APPLICATION NUMBER: US 60/071,449
PRIOR FILING DATE: 1998-01-13
PRIOR APPLICATION NUMBER: US 60/105,511
PRIOR FILING DATE: 1998-10-23
NUMBER OF SEQ ID NOS: 109
SEQ ID NO 107
LENGTH: 572
TYPE: PRT
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US-09-724-676-54539
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TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 54539
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PRIOR APPLICATION NUMBER: US 09/544,398
PRIOR FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 09/543,771
PRIOR APPLICATION NUMBER: US 09/229,319
PRIOR FILING DATE: 1999-01-13
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TYPE: PRT
420
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Local Similarity 23.5%;
les 43; Conservative
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                                KORFHNIRGR------WTGRCMSCCRS 142
                                                                                                                                       QVVTAMGKTWHPEHFVCTHCQEEIGSRNFFE-----RDGQPY--CEK--DYHNLF
--GFHEKDGKAYCRKDYFDMFAPKCGGCARA 448
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                                                                   -NGPILDKVVTALDRTWHPEHFFCAQCGAFFGPE----
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RESULT 13
US-09-724-676-54542
; Sequence 54542, Application
; GENERAL INFORMATION:
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US-09-724-676-54540
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Best Local Similarity
Matches 30; Conserv
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GENERAL INFORMATION:
APPLICANT: Compugen LTD
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 54540
LENGTH: 479
TYPE: PRT
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 54541
LENGTH: 479
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APPLICANT: Compugen LTD
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                                                                                                                                 420 -- GFHEKDGKAYCRKDYFDMFAPKCGGCARA 448
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19.9%;
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Pred. No. 0.
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RESULT 15
US-09-724-676-54544
Sequence 54544, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
FILE REFERENCE: 129181.4 Compugen
CURRENT FILING DATE: 2000-11-28
CURRENT FILING DATE: 2000-11-28
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; ORGANISM: Homo sapiens
US-09-724-676-54543
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SO ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 54543
LENGTH: 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 54543, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 54542
LENGTH: 479
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Search completed: December 13, Job time: 25.0859 secs
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Best Local Similarity
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                                                        --GFHEKDGKAYCRKDYFDMFAPKCGGCARA 448
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Pred. No. 0.2;
22; Mismatches
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Minimum DB seq
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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length: 2000000000
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0: /cgn2_6/ptodata/1/paa/US086_COMB.pep: *
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1: /cgn2_6/ptodata/1/paa/US086_COMB.pep: *
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Copyright (c) 1993 - 2002 Compugen Ltd.
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## ALIGNMENTS

RESULT 1 US-09-701-080A-18

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; SOFTWARE: PatentIn Ver. 2.1
; SEO ID NO 18
; LENGTH: 151
; TYPE: PRT
; ORGANISM: Human papillomavirus
US-09-701-080A-18
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GENERAL INFORMATION:
APPLICANT: O'CONNOR, MARK J.
APPLICANT: ZIMMERMAN, HOLGER
TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING
TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION
FILE REFERENCE: 117-328
                                                                   Query Match
Best Local Similarity
Matches 151; Conserva
                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/701,080A
CURRENT FILING DATE: 2001-02-27
PRIOR APPLICATION NUMBER: GB 9811303.8
PRIOR FILING DATE: 1998-05-26
                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: GB 9900157.0 PRIOR FILING DATE: 1999-01-05
                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 36
1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
                                                                        Conservative
                                                                   100.0%; Score 851; DB 21; 100.0%; Pred. No. 1e-80; tive 0; Mismatches 0;
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                                                                                                               Length 151;
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Result No.

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Match Length DB

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Description

SUMMARIES

Query

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151 21 158 1 158 23 273 19 273 24 292 19

1 US-09-701-080A-18 PCT-US00-33549-31 IS US-09-980-523A-2 9 US-09-581-976-4 US-10-000-903-4 9 US-09-581-976-10

Sequence 18, Appl Sequence 31, Appl Sequence 2, Appli Sequence 4, Appli Sequence 4, Appli Sequence 10, Appl

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Sequence 2, Application US/09980523A
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
TITLE OF INVENTION: POLYEPITOPIC PROTEIN FRAGMENTS OF THE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WOB1 AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
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PCT-US00-33549-31
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Best Local :
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APPLICANT:
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CURRENT FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 60/172,705
PRIOR FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: US 09/641,528
PRIOR PILING DATE: 2000-08-15
NUMBER OF SEQ ID NOS: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Inducing Cellular Immune Responses to Human TITLE OF INVENTION: Papillomavirus Using Peptide and Nucleic Acid TITLE OF INVENTION: Compositions FILE REFERENCE: 018623-016110PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Sette, Alessandro APPLICANT: Sidney, John APPLICANT: Southwood, Scott APPLICANT: Chesnut, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                            KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             150;
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Chesnut, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Celis, Esteban
Grey, Howard M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 843; DB 1;
Pred. No. 7.3e-80;
0; Mismatches 1
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                                                                                                             OF THE E6 AND
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В
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OTHER INFORMATION: Chimaeric protein (protein D from Haemoplilus)
THER INFORMATION: influenza B and E6 from Human papilloma virus type
OTHER INFORMATION: 16)
US-09-581-976-4
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SEQ ID NO 2
LENGTH: 158
                                                                                                                                                                                         Best Local Similarity Matches 150; Conserv
                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 4
LENGTH: 273
                                                                                                                                                                                                            Query Match
Best Local
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Best Local
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CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR :
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: GB
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
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234
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Local Similarity 99.38;
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                                                                             AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKFLCDLLIRCINCQKFLCPEEKQRHLD 120
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                              KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                             AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                                        99.1%;
99.3%;
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                                                                                                                                                                                        Score 843; DB 19;
Pred. No. 1.4e-79;
0; Mismatches 1;
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Pred. No. 7.3e-80;
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264
                                                                                                                                                                                                                      Length 273;
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US-10-000-903-4

Sequence 4, Application US/10000903 GENERAL INFORMATION:

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                                                                                                                                                      GRGANISM: ChArtificial Sequence FEATURE:
GTHER INFORMATION: Chimaeric protein OTHER INFORMATION: pneumoniae and E6 OTHER INFORMATION: 16)
US-09-581-976-10
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SOFTWARE: Fast
SEQ ID NO 10
FRIGHH: 292
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Best Local Similarity
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                                                                           Query Match
Best Local Similarity
Matches 150; Conserv
                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/581,976
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
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PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
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APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
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SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: GB 9717953.5 PRIOR FILING DATE: 1997-08-22
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CURRENT FILING DATE: 2001-10-01
                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                              TYPE: PRT
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MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
                    MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version 3.0
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99.3%;
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                                                                           Score 843; DB 19;
Pred. No. 1.5e-79;
0; Mismatches 1;
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                                                                                                                                                                                             (Clyta from Streptococcus from Human papilloma virus
                                                                                                                                                                                             papilloma virus type
                                                                                                             Length 292;
                                                                             Indels
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US-09-581-976-6

Sequence 6, Application US/09581976
GENERAL INFORMATION:

SOFTWARE: SEQ ID NO 6

LENGTH: 37 TYPE: PRT

371

ORGANISM: Artificial Sequence

NUMBER OF SEQ ID NOS:

FastSEQ for Windows Version 3.0

PRIOR APPLICATION NUMBER: GB 9727262.9 PRIOR FILING DATE: 1997-12-24

CURRENT FILING DATE: 2000-06-20 PRIOR APPLICATION NUMBER: PCT/E PRIOR FILING DATE: 1998-12-18

PCT/EP98/08563

CURRENT APPLICATION NUMBER: US/09/581,976
CURRENT FILING DATE: 2000-06-20

FILE REFERENCE: APPLICANT:

B45124

APPLICANT: Gerard, Catherine Marie Ghislaine TITLE OF INVENTION: Vaccine

Dalemans, Wilfried L.J.

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                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 10
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                                                                                                                                                                                                               Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Vaccine FILE REFERENCE: B45107
                                                                                                                                                                                                                                                                                                                   LENGTH: 29
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                  121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                      121
                                                                    193 AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
253 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 283
                                                                                      61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                       292
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                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                              99.1%;
99.3%;
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                                                                                                                                                                                                                            Score 843; DB 24; Pred. No. 1.5e-79;
                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                             Length 292;
                                                                                                                                                                                                            Indels
                                                                                                                                                                                                            0;
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RESULT 10
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US-09-581-976-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-6
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                                                                                        Sequence 14, Application US/09581976 GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10000903 GENERAL INFORMATION:
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Best Local :
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                         APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
CURRENT APPLICATION NUMBER: US/09/581,976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 23
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                                                                                                                                                                                                                                                      174
                                                                                                                                                                                                                                                                                                                    114
                                                                                                                                                                                     234 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 264
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Delisse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
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99.3%;
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Pred. No. 2e-79;
0; Mismatches
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Pred. No. 2e-79;
0; Mismatches 1;
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US-10-000-903-14
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                                                                                                                                              Query Match
Best Local Similarity
Matches 150; Conserv
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Best Local Similarity
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SEQ ID NO 14
                                                                                                                                                                                                                                        LENGTH: 390
TYPE: PRT
ORGANISM: Homo s
                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
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APPLICANT: Cabezon Silva,
APPLICANT: Delisse, Anne-
                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: B45107
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APPLICANT:
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PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB PRIOR EFILING DATE: 1997-12-24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 390
TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                      133 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
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                 61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                       1 MFQDFQERFRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Gerard, Catherine Marie Ghislaine
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                                                                                                                                                Conservative
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                                                                                                                                            Score 843; DB 24;
Pred. No. 2.1e-79;
0; Mismatches 1;
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Pred. No. 2.1e-79;
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                                                                                                                                                                                 Length 390;
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121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151

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; TYPE: PRT
; ORGANISM: Human papillomavirus
US-60-306-809-20
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SEQ ID NO 13
LENCTH: 151
TYPE: PRT
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Best Local
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TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES
FILE REFERENCE: 0630/0M137-US0
CURRENT APPLICATION NUMBER: US/60/415,929
CURRENT FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 14
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Best Local Similarity
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APPLICANT: FOLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
TILE REFERENCE: UTSC:560USP1
CURRENT APPLICATION NUMBER: US/60/306,809
CURRENT FILING DATE: 2001-07-20
NUMBER OF SEO ID NOS: 25
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                                                                                                                                                                                                                                                                            ORGANISM: Human papillomavirus type 16
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               121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                               1 MFQDPQERPRKLPQLCTELQTT1HDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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98.7%;
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98.7%;
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Pred. No. 1.4e-79;
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151
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SEQ ID NO 1
SEQ ID NO 1
LENGTH: 248
TYPE: PRT
ORGANISM: Human papillomavirus
US-60-415-929-1
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US-60-415-929-7
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                                                                                                                                                                                                                                                                                                   ; SEQ ID NO 7
; LENGTH: 248
; TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/60415929 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/60415929 GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Cassetti, Maria
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 0630/0MJ37-US0
CURRENT APPLICATION NUMBER: US/60/415,929
CURRENT FILING DATE: 2002-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS FILE REFERENCE: 0630/0M.137-US0
CURRENT APPLICATION NUMBER: 05.60/415,929
CURRENT FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 14
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SOFTWARE: PatentIn version 3.1
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                 KQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                VCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK
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Pred. No. 2.6e-79;
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Pred. No. 8.7e-79;
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Q9frj9 oryza sativ Q59667 pyrococcus Q9v0c2 pyrococcus Q8u2e5 pyrococcus Q8u2e5 pyrococcus Q9uwq9 thermococcu Q9xt13 caenorhabdi Q97ee3 clostridium Q9xvw9 caenorhabdi Q9yfk5 aeropyrum p Q9biml giardia lam Q12157 saccharomyc Q9kv11 vibrio chol Q9lul6 arabidopsis Q9fhg8 arabidopsis Q9d1y0 mus musculu
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PERCUENCE FROM N.A.

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RESTRAIN-CV. NIPPONBARE;

RA BUELL C.R., Yuan Q., Moffat K.S., Hill J.N., Burr P.C., Hsiao J.,

RA Zismann V., Pai G., Bowman C.L., Fujii C.Y., Vanaken S.E.,

RA Zismann V., Pai G., Bowman C.L., Fujii C.Y., Vanaken S.E.,

RA Dowman C.L., Craven B., Utterback T.R., Khalak H., Feldblyum T.V.,

RA Dowman C.L., Craven B., Utterback T.R., Khalak H., Feldblyum T.V.,

RA Quackenbush J., White O., Salzberg S.L., Fraser C.M.;

RA Quackenbush J., White O., Salzberg S.L., Fraser C.M.;

ROUTE 2011 To the EMBL/GenBank/DDBJ databases.

C. -- SIMLARITY: CONTAINS 1 RING-TYPE ZINC FINGER.

REMBL; AC073166; AAG46117.1;

REMBL; AC073166; AAG46117.1;

REMBL; PEO0097; zf-C3HC4; 1.

REFORMER SMORT; SMO0184; RING; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Putative ring finger protein. OSJNBB0064P21.7.
                                                                                                                                          SEQUENCE
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193 NSSCPSC 199
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                                                                      Conservative
                                                                                    79.5%;
57.1%;
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                                                                      Mismatches
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RESULT 2
Q59667

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01-MAY-2000
01-MAR-2002
                                                                                                                                                                                                    "Pyrococcus abyss1 genome sequence: insights is structure and evolution.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ EMBL; AJ248285; CAB49782.1;
Interpro; IPR001450; 4Fe4S_ferredoxin. PROSITE; PS00198; 4Fe4S_FERREDOXIN; 2.
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EMBL; X75255; CAA53034.1; -.
InterPro; IPR001450; 4Fe4S_ferredoxin.
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MEDLINE-95219100;
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NCBI_TaxID=2261;
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Volpe A., Galli G.,
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Pred. No. 1
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STATINDSM 4573;
MEDLINE=20050631; PubMed=10583413;
MEDLINE=20050631; PubMed=10583413;
MEDLINE=20050631; PubMed=10583413;
MEDLINE=20050631; PubMed=10583413;
MEDLINE=20050631; Adams M.W.W., Kovacs K.

"Biochemical and molecular characterization of from the hyperthermophilic archaeon, Thermococ Eur. J. Biochem. 266:1158-1165 (1999).

EMBL; AF039208; AAB94933.1; -.

InterPro; IPR001450; 4Fe4S_ferredoxin.

Pfam; PF00037; fer4; 1.

PROSITE; PS00198; 4Fe4S_FERREDOXIN; 2.

SEQUENCE 369 AA; 43293 MW; 42332FFB7D74997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.

STRAIN="VC1 / DSM 3638 / ATCC 43587 / JCM 8422;

Weiss R.B., Dunn D.M., Robb F.T., Brown J.R.;

"The complete sequence of the Pyrococcus furiosus genome.";

submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AE010204; AAL81015.1; -

Complete proteome.

SEQUENCE 367 AA; 43398 MW; 8329F3842CBC48D0 CRC64;
  Q9XTT3
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01-MAY-2000 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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'Ization of the [NiFe] hydrogenase "harmococcus litoralis.";
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Best Local :
                                                                                                                                                                                   Tatusov R.L., Sabathe F., Doucette-Stamm L., So Bennett G.N., Koonin E.V., Smith D.R.;
"Genome sequence and comparative analysis of th bacterium Clostridium acetobutylicum.";
J. Bacteriol. 183:4823-4838(2001).
EMBL; AE007812; AAK81107.1;
InterPro; IPR004404; IlvD.
InterPro; IPR00581; ILVD_EDD_family.
InterPro; IPR00581; ILVD_EDD_family.
ProDom; PD002601; ILVD_EDD_family; 1.
ProDom; TIGR00100; 11vD, 1.
PTORFAMS; TIGR00110; 11vD, 1.
  Best Local Similarity
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01-NOV-1999 (TrEMBLrel. 1
01-DEC-2001 (TrEMBLrel. 1
01-JUN-2002 (TrEMBLrel. 2
Y49E10.20 protein.
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Complete
SEQUENCE
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STRAIRWATCC 824 / DSM 792 / VKM B-1787;

MEDLINE-21359325; PubMed-11466286;

Noelling J., Breton G., Omelchenko M.V., Makarova K.S., Zeng Q.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,

Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clostridium acetobutylicum.

Bacteria; Firmicutes; Bacillus/Clostridium group;
Clostridiales; Clostridiaceae; Clostridium.
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Eukaryota; Metazoa; Nematoda;
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Science 282:2012-2018(1998).
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01-OCT-2000
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T28C6.8.
                                                                                                                                                                                                                  SEQUENCE FROM N.A.

STRAIN-EL TOR N16561 / SEROTYPE 01;

MEDLINE-20406833; PubMed=19952301;

Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L.,

Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A.,

Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D.,

Ermolaeva M.D., Vamathevan J., Bass S., Qin H., Dragoi I., Sellers P.,

McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., White O.,

Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,

Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     investigating biology.";
Science 282:2012-2018(1998).
EMBL; Z54238; CAA90999.2; -.
SEOUENCE 119 AA; 13204 MW;
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Rhabditidae; Pelode
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01-MAR-2001 (TrEMBLrel.
01-MAR-2001 (TrEMBLrel.
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                                                                                                                           Nature 406:477-483(2000)
                                                                                                                                                                "DNA sequence of both chromosomes cholerae.";
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SEQUENCE 144 AA; 15
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=21391783; PubMed=11500396;
MEDLINE=21391783; PubMed=11500396;
Bienz M., Siles-Lucas M., Wittwer P., Muller N.
"vsp Gene Expression by Giardia lamblia Clome G
Antigenic Variation In Vivo and In Vitro.";
Tofect. Immun. 69:5278-5285(2001).
                                                                                                                                                                                                                                                                                                                                Q9BIM1;
Q9BIM1;
                                                                                                                                                                                              Variable surface protein 7b (Fragment) Giardia lamblia (Giardia intestinalis) Eukaryota; Diplomonadida; Hexamitidae;
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Kawarabayasi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Jin-no K., Takahashi M., Sekine M., Baba S.-I., Ankai A., Kc Hosoyama A., Fukui S., Nagai Y., Nishijima K., Nakazawa H., Takamiya M., Masuda S., Funahashi T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi A., Aoki K.-I., Kubota K., Nakamura Y., Nomura N., Sako Y., Kikuchi H.;

"Complete genome sequence of an aerobic hyper-thermophilic crenarchaeon, Aeropyrum pernix Kl.";
DNA Res. 6:83-101(1999).
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                                                                                                                                                                                                                                     01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence up
01-JUN-2002 (TrEMBLrel. 21, Last annotation
Variable surface protein 7b (Fragment).
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Hypothetical protein; Complete proteome.

SEQUENCE 148 AA; 16500 MW; 263AEBD89E893D7F
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01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9YFK5;
01-NOV-1999
                                                                                                                                                                            NCBI_TaxID=5741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aeropyrum pernix.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 4; Conserv
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(TrEMBLrel.)
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57.1%;
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Pred. No. 1.5e
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Pred. No. 1.5e+02;
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Best Local S
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01-NOV-1996 (TrEMBLrel. 01, Last sequence upont of the control of the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Andre B., Vissers S., Urrestaraz Submitted (FEB-1995) to the EMBI EMBL; 274056; CAA98564.1; -. EMBL; 248432; CAA985351.1; -. SCD: 25002166; APC11. Interpro; IPRO01841; Znf_ring. SMART; SMO0184; RING; 1.
                                                                                                                                               01-OCT-2000
01-OCT-2000
01-MAR-2002
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Bacteria; Protec
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                                                                                                                                                                                                                  Q9KVL1;
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SEQUENCE FROM N.A
                                      NCBI_TaxID=666;
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(JUL-1996) to
                                                              Proteobacteria;
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157
157 AA;
                                                                                                                             O (TrEMBLrel. 15, o (TrEMBLrel. 15, o (TrEMBLrel. 20, al protein VC0131.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                      PRELIMINARY;
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57.18;
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57.1%;
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Pred. No. 1.5e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                            Score 30; DB 3; Le
Pred. No. 1.6e+02;
0; Mismatches 3;
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Best Local
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Q1-OCT-2000 (TrEMBLrel. 15, Created)
Q1-OCT-2000 (TrEMBLrel. 15, Last sequence update)
Q1-OCT-2000 (TrEMBLrel. 19, Last annotation update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Similarity to RING-H2 zinc finger protein ATL3.
Arabidopsis thaliana (Mouse-ear cress)
Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidaeurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L., Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A., Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D., Ermolaeva M.D., Vamathevan J., Bass S., Qin H., Dragoi I., Sellers P., McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., White O., Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,
                                                                                                                                                                                                                                                                                 -!- SIMILARITY: CONPAINS 1 RING-TYPE EMBL; AB022220; BAB01038.1; -. InterPro; IPR001841; Znf ring. Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9LUL6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical protein; SEQUENCE 198 AA; 2:
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Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sato S., Nakamura Y., Kaneko T., Kato T., Asamizu E., Tabata S.; Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. STRAIN-COLUMBIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000152; Asx_hydroxyl.
PROSITE; PS00010; ASX_HYDROXYL; UNKNOWN_1.
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EMBL; AE004103; AAF93308.1;
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                                                                                                                                                                                                                               Zinc-finger
                                                                                                                                                                                                                                                           SMART; SM00184; RING; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          "Structural analysis of Arabidopsis thaliana chromosome 3. I. Sequence features of the regions of 4,504,864 bp covered by sixty P1 and TAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=20277480; PubMed=10819329;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=3702;
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123
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22841 MW; Cl39FCAA2E26F3A7 CRC64;
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57.1%;
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. 1.8e+02;
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1.7e+02;
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RESULT 15

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Search completed: December 13, Job time: 6.82822 secs
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Q1-MAR-2001 (TrEMBLrel. 16, Created)
Q1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
Q1-MAR-2001 (TrEMBLrel. 19, Last annotation update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Similarity to C3HC4-type RING zinc finger protein.
Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosida
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kaneko T., Katoh T., Sato S., Nakamura Y., Asamizu E., K
Miyajina N., Tabata S.;
"Structural analysis of Arabidopsis thaliana chromosome
Sequence features of the regions of 1,011,550 bp covered
pl and TAC clones.";
DNA Res. 6:183-195(1999).
-!- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
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Zinc-finger.
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Pfam; PF00097; zf-C3HC4; 1.
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r., Sato S., Nakamura Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                          23523 MW;
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57.1%;
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(01dSN) XNVTB 35Vd SIH

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152(a) 1/99

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Result
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            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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          SwissProt_40:*
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P20926 proteus vul
P03598 tobacco str
P22610 pseudomonas
O13747 schizosacch
O9wtv7 mus musculu
P11109 bacteriopha
O9nvw2 homo sapien
O04519 mus musculu
       946607
9262919
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061220
062918
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P15181
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P164292
P25330
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P1842
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Q04519
Q66680
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Q97ee3 clostridium
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7 arabidopsis
2 homo sapien
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RESULT 2

34 29 74.4 23 1 HOXU_ALCEU P22318 alcaligenes 529 74.4 281 1 VNS1_INBAC P13883 influenza b 36 29 74.4 281 1 VNS1_INBAC P13883 influenza b 37 29 74.4 281 1 VNS1_INBAC P12592 influenza b 38 29 74.4 281 1 VNS1_INBHX P12596 influenza b 39 29 74.4 281 1 VNS1_INBSU P12596 influenza b 40 29 74.4 281 1 VNS1_INBYA P12596 influenza b 41 29 74.4 281 1 VNS1_INBYA P12596 influenza b 42 29 74.4 373 1 Y80S_METJA Q58218 methanococc 43 29 74.4 421 1 RF1_HUMAN Q6587 homo sapien 44 29 74.4 421 1 RF1_HUMAN Q58218 methanococc 45 29 74.4 421 1 RF1_HUMAN Q58218 methanococc 45 29 74.4 459 1 ZPR1_MOUSE Q6587 homo sapien Q58239 methanococc 45 29 74.4 459 1 ZPR1_MOUSE Q62384 mus musculu LIVD_CLOPA STANDARD; PRT; 286 AA.		ed)	eate	26, Cr	(Rel.	P31959; 01-JUL-1993 (Rel. 26, Created)	01-JUL-
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29 74.4 233 1 HOXU_ALCEU P22318 29 74.4 281 1 VNS1_INBAC P13883 29 74.4 281 1 VNS1_INBAC P12594 29 74.4 281 1 VNS1_INBHK P12594 29 74.4 281 1 VNS1_INBID P12596 29 74.4 281 1 VNS1_INBJD P12602 29 74.4 281 1 VNS1_INBJJ P12602 29 74.4 281 1 VNS1_INBJJ P12602 29 74.4 281 1 VNS1_INBJA P08013 29 74.4 333 1 V808_METJA Q58218	-	RNG1_HUMAN	_	377	74.4	29	43
29 74.4 233 1 HOXU_ALCEU 29 74.4 281 1 VNS1_INBAC 29 74.4 281 1 VNS1_INBAC 29 74.4 281 1 VNS1_INBHK 29 74.4 281 1 VNS1_INBHK 29 74.4 281 1 VNS1_INBID 29 74.4 281 1 VNS1_INBID 29 74.4 281 1 VNS1_INBU 20 74.4 281 1 VNS1_INBU 20 74.4 281 1 VNS1_INBU 21 P12602		Y808_METJA	_	333	74.4	29	42
29 74.4 233 1 HOXU_ALCEU P22318 alcaligene 29 74.4 281 1 VNS1_INBAC P1388 influenza 29 74.4 281 1 VNS1_INBGA P12592 influenza 29 74.4 281 1 VNS1_INBHK P12594 influenza 29 74.4 281 1 VNS1_INBHK P12596 influenza 29 74.4 281 1 VNS1_INBSJD P12596 influenza 29 74.4 281 1 VNS1_INBSJD P12501 influenza 29 74.4 281 1 VNS1_INBSJ P12601 influenza		VNS1_INBYA	_	281	74.4	29	41
29 74.4 233 1 HOXU_ALCEU P22318 alcaligene 29 74.4 281 1 VNS1_INBAC P13883 influenza 29 74.4 281 1 VNS1_INBGA P12592 influenza 29 74.4 281 1 VNS1_INBHK P12594 influenza 29 74.4 281 1 VNS1_INBID P12596 influenza 29 74.4 281 1 VNS1_INBID P12596 influenza 29 74.4 281 1 VNS1_INBID P12601 influenza	influenza	VNS1_INBVJ	ш	281	74.4	29	40
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29 74.4 233 1 HOXU_ALCEU P22318 alcaligene 29 74.4 281 1 VNS1_INBAC P13883 influenza 29 74.4 281 1 VNS1_INBGA P12592 influenza 29 74.4 281 1 VNS1_INBHK P12594 influenza	influenza	VNS1_INBID	ب	281	74.4	29	38
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182 NTACPTC 188	4 NXXCPXC 10	Query Match 79.5%; Score 31; DB 1; Length 286; Best Local Similarity 57.1%; Pred. No. 60; Mismatches 4; Conservative 0; Mismatches 3; Indels 0; Gaps 0	NUN_TER 286 AA; 29925 MW; 7CF6665CC1EF5927 CRC64;	191	Lyase; Iro (4FE-4S)	IAL.	PROSITE; PS00886; ILVD_EDD_1; 1.	Pfam; PF00920; ILVD_EDD; 1.	AAC41395.1; 000581: TLVD EDD family	or send an email to licensewisb-sib.ch).	ee http://www.is	ified and this statement is not removed. Usage by and for commerc	the European Bioinformatics Institute. There are no restrictions on its	s and the EMBL outstation	produced through a	SIMILARITY: BELONGS TO THE ILVD / EDD FAMILY.	-!- COMACTOR: BINDS 1 4ME-48 CLUSTER (POTENTIAL). -!- PATHWAY: Valine and isoleucine biosynthesis: fourth step.	•	-!- CATALYTIC ACTIVITY: 2,3-dihydroxy-3-methylbutanoate = 3-methyl-2-	אמא Sea 4:105-111/1993) באמא Sea 4:105-111/1993	de sequence of genes involved in the leucine	<pre>MEDLINE=94227243; PubMed=8173074; Oultram J.D., Loughlin M., Walmslev R.W., Gunnerv S.M., Minton N.P.;</pre>	SEQUENCE FROM N.A.	CIOSTITATIM.  NCBI_TaxID=1501;	Clostridium pasteurianum.  Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;	(Rel. 26, (Rel. 41, cid dehydra	101-THI-1993 (Rel 26 Created)	TIVE CLOPA

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P20926;
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between
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"Genome sequence and comparative analysis of the solvent bacterium Clostridium acetobutylicum.";
J. Bacteriol. 183:4823-4838(2001).
-! CAMALYTIC ACTIVITY: 2,3-dihydroxy-3-methylbutanoate oxobutanoate + H(2)0.
-! COPACTOR: Binds 1 4Fe-4S cluster (Potential).
-! PATHWAY: Valine and isoleucine biosynthesis; fourth -! SIMILARITY: BELONGS TO THE ILVD / EDD FAMILY.
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InterPro; IPR000581; ILVD_EDD_family.
Pfam; PF00920; ILVD_EDD, 1.
ProDom; PD002691; ILVD_EDD_family; 1.
TIGREAMS; TIGR00110; ilvD; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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MEDLINE-21359325; PubMed-11466286;
Moelling J., Breton G., Omelchenko M.V., Makarova K.S., Zen.
Noelling J., Lee H.M., Dubois J., Qiu D., Hitti J., Wolf Y.I.
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PROSITE; PS00887; ILVD_EDD_2; 1.
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MEDLINE=84199544; PubMed=6546793;
MEDLINE=819544; PubMed=6546793;
Median B.J.C., Janssen H., Zuidema D.,
"Complete nucleotide sequence of tobacco st:
Nucleic Acids Res. 12:2427-2437(1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Nucleotide sequence and comparative analysis of the frd operor encoding the fumarate reductase of Proteus vulgaris. Extensive sequence divergence of the membrane anchors and absence of an frd-linked ampC cephalosporinase gene.";

Eur. J. Biochem. 167:481-488(1987).
                     modified and this statement is not removed entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restructe by non-profit institutions as long as its content
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Tobacco streak virus (strain WC)
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STRAIN=ATCC 15692 / PAO1;
STRAIN=9110333; PubMed=1898929;
MEDLINE=9110333; PubMed=1898929;
Bally M., Ball G., Badere A., Lazdunski A.;
"Protein secretion in Pseudomonas aeruginosa:
an integral inner membrane protein homologous
pneumoniae secretion function protein PulO.";
J. Bacteriol. 173:479-486(1991).
                                                                                                                                                                                                                                                                                                                          MEDLINE=20437337; PubMed=10984043; Stover C.K., Pham X.-Q.T., Erwin A.L., Mizoguchi S.D., Warrener P., Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M. Garber R.L., Goltry L., Tolentino E., Westbrock-Wadman S., Yuan Y., Brody L.L., Coulter S.N., Folger K.R., Kas A., Larbig K., Lim R.M., Smith K.A., Spencer D.H., Wong G.K.-S., Wu Z., Paulsen I.T., Reizer J., Saler M.H., Hancock R.E.W., Lory S., Olson M.V.; "Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen."; Nature 406:959-964(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-1991 (Rel. 19, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
17-ype 4 prepilin-like proteins leader peptide processing enzyme
(Protein secretion protein XCPA) (PILD protein) [Includes: Leader
peptidase (EC 3.4.99.-) (Prepilin peptidase); N-methyltransferase
(EC 2.1.1.-)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nunn D., Bergman S., Lory S.;
"Products of three accessory genes, pilB, pilC, and pilD,
required for biogenesis of Pseudomonas aeruginosa pili.";
J. Bacteriol. 172:2911-2919(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pseudomonas aeruginosa
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MEDLINE=94335721; PubMed=8057924; Strom M.S., Nunn D.N., Lory S.; "Posttranslational processing of of Pseudomonas aeruginosa.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=90264276; PubMed=1971619;
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                                                                                                                                                        Pseudomonas aeruginosa --
Gene 192:117-121(1997).
                                                                                                                                                                                          Lory S., Strom M.S.;
"Structure-function relationship of type-IV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LEP4_PSEAE
                                                                                                          REVIEW.
                                                                                                                                                                                                                                                             MEDLINE=97368114; PubMed=9224881;
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erPro; IPR002681; :
n; PF01787; Ilar_co
UENCE 237 AA; 20
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Similarity 57.1%;
4; Conservative
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AA; 26237
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YDRD\_SCHPO 013747; 15-JUL-1998 15-JUL-1998 15-JUN-2002

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36, 41,

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                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
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J. Biol. Chem. 273:19120-19129(1998).
-i- FUNCTION: CLEAVES TYPE-4 FIMBRIAL LEADER SEQUENCE AND THE N-TERMINAL (GENERALLY PHE) RESIDUE. PROCESSES THE PRECURSOR DURING MEMBRANE TRANSLOCATION. REQUIRED FOR OF TYPE IV PILL AND FOR SECRETION OF MOST PROTEINS.
                                                                                                                                                      ACT_SITE VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=98334648;
Pepe J.C., Lory S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Identification of active-site cysteines in the conserved domain of PilD, the bifunctional type IV pilin leader peptidase/N-methyltransferase of Pseudomonas aeruginosa.";
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PRINTS; PR00864;
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MEDLINE=93340186; PubMed=8340405;
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                                                                                                                                                                                                                                                                                                            Multifunctional enzyme; Hydrolase; Protease; Transferase;
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BL; M61096; AAA26023.1; -.
BL; AE004867; AAG07916.1; -.
R; C35384; C35384.
R; A39131; A39131.
                                                                     4 NXXCPXC
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                                               NSACPRC
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4; PREPILNPTASE.
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PubMed=9668097;
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T -> A (IN STRAIN PAK).
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Hypothetical RING finger protein C16E8.13 in

chromosome

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RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
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RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Holzer D., Hilbert D., Odell C.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Kutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Woodward J., Volckaert S., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volckaert G., Aert R., Schaefer M., Mueller-Auer S.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Weltjens I., Jaget R., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Gailbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Gailbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Gailbert F., McCombie W., Galaure V., Mottier S.,
RA Gailbert F., McCombie W.R., Paulsen I., Potashkin J.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RT Thode G., Nurse P.,
RT The genome sequence of Schizosaccharomyces pombe.";
RL Nature 415:871-880 (2002)

- Le SIMILARITY: TO YEAST YHLOlOC AND C. ELEGANS EEEB8.9.

- Le SIMILARITY: TO YEAST YHLOLOC AND C. ELEGANS EEEB8.9.
                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                          InterPro; IPR001607; Znf_UBP.
InterPro; IPR001841; Znf_ring.
Pfam; PF00097; zf-C3HC4; 1.
Pfam; PF02148; zf-UBP; 1.
SMARP; SM00184; RING; 1.
SMARP; SM00290; ZnF_UBP; 1.
SMART; SM00290; ZnF_UBP; 1.
PROSITE; PS00518; ZF_RING_1; FALSE_NEG.
PROSITE; PS0089; ZF_RING_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                       ZN_FING
                                                                                                                                                                                                                                            Hypothetical protein;
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Ascomycota; Schizosaccharomycetes;
etales; Schizosaccharomycetaceae;
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534 I
61825 MW;
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57.1%;
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                                                                                    Score 30; DB Pred. No. 1.3e 0; Mismatches
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POLY-LYS.
; 2C3FDB4FD7CF70E1 CRC64;
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1.3e+02;
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RESULT 7
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Best Local
                                                                                                                                       EXO2_BPT5
P11109;
                                            01-JUL-1989 (Rel. 11, Created)
01-JUL-1989 (Rel. 11, Last seq
16-OCT-2001 (Rel. 40, Last anno
Probable exonuclease subunit 2
                                                                                                                                                                                           _BPT5
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SEQUENCE
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ZN_FING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long as its content modified and this statement is not removed. Usage by are entitles requires a license agreement (See http://www.isb
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16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
RING finger protein 12 (LIM domain interacting RII
(RING finger LIM domain-binding protein) (R-LIM).
RNF12 OR RLIM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00518; ZF_RING_1; FALSE_NEG PROSITE; PS50089; ZF_RING_2; 1.
Transcription regulation; Zinc-finger.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGD; MGI:1342291; Rnf12.
InterPro; IPR001841; Znf_ring.
Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      factors via recruitment of the histone deacety.

Nat. Genet. 22:394-399(1999).

-i- FUNCTION: ACTS AS A NEGATIVE CO-REGULATOR I

TRANSCRIPTION FACTORS. VIA THE RECRUITMENT

DEACETYLASE COREPRESSOR COMPLEX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-99364422; PubMed-10431247;
Bach I., Rodriguez-Esteban C., Carriere C.,
Rose D.W., Glass C.K., Andersen B., Izpisua
Rosenfeld M.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            coregulators of LIM homeodomain factors.";
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
Bacteriophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "RLIM inhibits functional activity of I factors via recruitment of the histone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART; SM00184; RING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: ASSOCIATES WITH LIM/HOMEOBOX FACTORS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
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                                                                                                                                                                                                                                                                                                                                                                                    Similarity 4; Conserv
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600 i
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                                                                                                                                                                  STANDARD;
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                                            11, Last sequence update)
40, Last annotation update)
ase subunit 2 (EC 3.1.11.-)
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66470
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Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                        76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WW.
                                                                                                                                                                                                                                                                                                                                                                                  Score 30; DB 1; Pred. No. 1.4e+02; % arematches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SER-RICH.
RING-TYPE.
POLY-SER.
; E68299530126E41D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
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                                                 (D13).
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SIN3A/HISTONE
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RESULT 9
RN12_HMAN
ID RN12_H
AC Q9NVW2
DT 16-OCT
DT 16-OCT
DT 15-JUN
DE RING
CO RING
CO ENKARY
OC ENKARY
OC Mammal
OX NCBI_T
RN [1]
RP SEQUEN
RX MEDLIN
RA Jenkin
RT "Funct
RT Corepor
RI Genomi
RN [2]
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Best Local
                                                                                                                                                                                               Q9NVWZ; Q9Y598;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
RING finger protein 12 (LIM domain interacting RI
(RING finger LIM domain-binding protein) (R-LIM)
RNF12 OR RLIM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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           SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Ostendorff H.P., Bossenz M., Mincheva A., Copeland N.G.,

Jenkins N.A., Lichter P., Bach I.;

"Functional characterization of the gene encoding RLIM,

corepressor of LIM homeodomain transcription factors.";

Genomics 69:120-130(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Early protein.
NP_BIND 35
SEQUENCE 612 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 genes D10-D15.";
Nucleic Acids Res. 16:10353-10354(1988).
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Kaliman A.V., Kryukov V.M., Bayer A.A.;
"The nucleotide sequence of the region
   Genomics
[2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Viruses; dsDNA viruses, no T5-like viruses.
                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                              RN12_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; S01933; WDBPT5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                       NCBI_TaxID-9606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR003439;
                                                                                                                                                                                                                                                                                                                                                                                           306 NTECPTC 312
                                                                                                                                                                                                                                                                                                                                                                                                                          4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RECOMBINATION, REPLICATION, AND REPAIR. SUBUNIT: COULD CONSISTS OF TWO SUBUNITS: SIMILARITY: STRONG TO T4 PROTEIN GP46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X12930; CAA31400.1; -
X12930; CAA31401.1; AI
AJ001191; CAA04586.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                        Chordata;
Primates;
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68673
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57.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 30; DB 1; Pred. No. 1.4e+02; Stampartches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATP (POTENTIAL).
; 92E27B652D1DE141 CRC64;
                                                                                                                                                        Craniata; V
Catarrhini;
                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                              624
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                                                                                                                                                        Vertebrata;
i; Hominidae;
                                                                                                                                                                                                                                                                                                              AA
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                                                                                                                                                                                                                  RING finger protein)
M) (NY-REN-43 antigen).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 612
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                                                                                                                                                                     Euteleostomi;
                                                                                                                                                        Homo.
                                                                             Gilbert
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RESULT
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                                                                      Matches
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Best Local
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Jongeneel V., (
Old L.J.;
                                                                                                                     CONFLICT
CONFLICT
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CONFLICT
                                                                                                                                                                                 DOMAIN
ZN_FING
                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a clotween the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and formatical content is not removed.
                                                                                                                                                                                                                                                                 Genew; HGNC: 1
MIM; 300379;
                                                                                                                                                                                                                                                                                     EMBL; AJ271670; CAC14228.1; EMBL; AF155109; AAD42875.1; EMBL; AK001334; BAA91632.1;
                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                -1- SUBUNIT: ASSOCIATES WITH LIM/HOMEOBOX FACTORS.
-1- TISSUE SPECIFICITY: EXPRESSED IN MANY TISSUES.
-1- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Renal cell carcinoma;

MEDLINE=99438124; PubMed=10508479;

Scanlan M.J. Gordan J.D., Williamson B., Sto

Jongeneel V., Gure A.O., Jager D., Jager E.,
                                                                                                            SEQUENCE
                                                                                                                                                                                                                PROSITE; PS00518; ZF_RING_1; PROSITE; PS50089; ZF_RING_2;
                                                                                                                                                                                                                                     SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                         -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                      Transcription
                                                                                                                                                                                                                                                         InterPro; IPR001841;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Antigens recognized by autologous
                                                                                                                                                                DOMAIN
                             604
10
                                                  4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                           CAUTION: Ref.2 sequence differs in position 134 and 142.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRANSCRIPTION FACTORS. VIA THE RECRUITMENT DEACETYLASE COREPRESSOR COMPLEX.
                                                                                                                                   28; ZF_RIN_
.089; ZF_RIN_
.on regulation; Z
422 506
422 506
570 611
453 481
453 481
100 50
114
134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Cancer
                             NSTCPIC
                                                                                                                                                                                                                                             Pro; IPR001841; Znf_ring.
PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                     SM00184; RING; 1
                                                                                                                                                                                                                                                                            HGNC:13429; RNF12
                                                                              Similarity
                                                                                                            624 AA;
                                                                      Conservative
                                                 10
                             610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83:456-464(1999).
                                                                                                                              506
611
481
506
126
134
145
                                                                                                            68527
                                                                              76.9%;
57.1%;
                                                                                                            MΨ;
                                                                                                                                                                                                       Zinc-finger
                                                                                                                     RING-TYPE.
POLY-SER.
POLY-SER.
S -> C (IN REF. 1).
N -> D (IN REF. 3).
YS -> NR (IN REF. 3).
                                                                                                                                                                                                                                                                                                ALT_FRAME
                                                                     0;
                                                                             Score 30;
Pred. No.
                                                                     Pred. No. 1.5
0; Mismatches
                                                                                                                                                                                                                         FALSE_NEG
                                                                                                                                                                                             SER-RICH
                                                                                                            DE3ADE09ACACBCF8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antibody
                                                                                                                                                                                                                                                                                                                                                                                                                       from that shown
                                                                                                                                                                                                                                                                                                                                        (See http://www.isb-sib.ch/announce/
                                                                                                                             N REF. 1).
N REF. 3).
(IN REF. 3).
                                                                             DB 1;
1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stockert
E., Knuth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in patients
                                                                                        Length 624;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A E
                                                                                                                                                                                                                                                                                                                                                                                                                       due
                                                                                                                                                                                                                                                                                                                                                                     restrictions on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIN3A/HISTONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bander N.H.,
Chen Y.-T.,
                                                                                                                                                                                                                                                                                                                                                                                                                       to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                with renal
                                                                                                                                                                                                                                                                                                                                                                                                                        frameshifts
                                                                     0;
                                                                                                                                                                                                                                                                                                                                                    for
                                                                                                                                                                                                                                                                                                                                                                                collaboration
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               s x
                                                                                                                                                                                                                                                                                                                                                            no
                                                                                                                                                                                                                                                                                                                                                                     its
                                                                    0;
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ASM\_MOUSE ID ASM\_M AC Q0451 DT 01-OC DT 01-FE

ASM\_MOUSE Q04519; Q1-OCT-1993 Q1-FEB-1996

(Rel.

27, Created) 33, Last sequence

update)

STANDARD;

PRT;

627

ΑA

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Query Match
Best Local
                Matches
                                                                                                                                                                                                                                                                 PIR; S27392; S27392.
PIR; S27393; S27393.
PIR; S27393; S27393.
MGD; MGI:98325; Smpdl.
InterPro; IPR004843; M-ppestrase.
InterPro; IPR004844; S/T_phosphtse.
                                                                                  CARBOHYD
CONFLICT
CONFLICT
                                                                                                                        CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUN-2002 (Rel. 41, Last annotation update) Sphingomyelin phosphodiesterase precursor (EC sphingomyelinase) (aSMase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                      the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                      SEQUENCE
                                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <del>-</del> + +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (JUL-2001)
-!- FUNCTION: CONVERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Newrzella D., Stoff
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-BALB/C; TIS
MEDLINE-93183402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMPD1 OR ASM.
                                                                                                                                                                                            DOMAIN
                                                                                                                                                                                                                                               Pfam; PF00149; Metallophos; 1. SMART; SM00118; SAPB; 1.
                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A
                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                   Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hofmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND 1,2-DIACYLGLYCEROLPHOSPHOGLYCEROL.

CATALYTIC ACTIVITY: Sphingomyelin + H(2)0 = N-acy choline phosphate.

SUBUNIT: MONOMER.

SUBCELLULAR LOCATION: Lysosomal.

MISCELLABEOUS: THERE ARE TWO TYPES OF SPHINGOMYEL (ACID), AND NSM (NEUTRAL).

SIMILARITY: BELONGS TO THE ACID SPHINGOMYELINASE SIMILARITY: CONTAINS 1 SAPOSIN B-TYPE DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
FUNCTION: CONVERTS SPHINGOMYELIN TO CERAMIDE. ASM ALSO HAS
PHOSPHOLIPASE C ACTIVITIES TOWARD 1.2-DIACYLGLYCEROLPHOSPHOCHOLINE
                                                                                                                                                                                                                                                                                                                                                         Z14252; CAA78619.1; -.
Z14132; CAA78506.1; -.
BC011304; AAH11304.1; -.
                4
                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (APR-1994)
                                                                                                                                                                                                                                   Glycosidase;
                                                                                                           45
83
84
173
333
393
518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  n and complete nucleotide sequence Hoppe-Seyler 373:1233-1238(1992).
                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        224-225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stoffel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         phosphodiesterase precursor (EC 3.1.4.12) (Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Liver;
                                                               44
627
167
184
173
333
333
393
393
518
611
48
69927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PubMed=1292508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of the acid sphingomyelinase of the mouse omplete nucleotide sequence of the gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata;
Rodentia;
                         76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                  Lysosome; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         384.
                                                                     ¥
                                                                             POTENTIAL.

SPHINGOWELIN PHOSPHODIESTERASE.
SAPOSIN LIKE TYPE B.

N-LINKED (GLCNAC. . .) (POTENTIAL).

S-> T (IN REF. 3).

G-> S (IN REF. 3).
               0,
                          Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                     0FFC7EA74EE71E91
                Mismatches
                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H(2)O = N-acylsphingosine
                            .5e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPHINGOMYELINASES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               databases
                                       Length 627
                                                                     CRC64;
                                                                                                                                                                                                                                   Signal.
               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAMILY
              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ASM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus
              Gaps
              0
HGL2_
ID
AC
DT
DT
                                                                                                                                                                                                                                   Db
                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
SYLA_AQUAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
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                                                                                                                                                                                                                                                                                                                                                                                    HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             066680;
                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                   4
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STITE TO COLUMN TO THE TRANSPORT OF THE

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RESULT 12

HGL2_ARATH S

ID HGL2_ARATH S

AC P46607; Q39018;

DT 01-NOV-1995 (Rel

DT 01-NOV-1997 (Rel

DT 15-JUN-2002 (Rel
                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000
30-MAY-2000
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-98196666; PubMed-9537320;
Deckert G., Warren P.V., Gaasterland T., Young W.G.
Graham D.E., Overbeek R., Snead M.A., Keller M., Au
Feldman R.A., Short J.M., Olson G.J., Swanson R.V.;
                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                               TIGREAMS; TIGR00396; leus_bact; 1.
PROSITE; PS00178; AA_TRNA_LIGASE_I; 1.
Amilioacyl-trNA synthetase; Protein biosynthesis; Ligase; ATP-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR002302; Leu-tRNAsynt
InterPro; IPR002300; tRNA-synt_la
InterPro; IPR001412; tRNA-synt_I.
Pfam; PF00133; tRNA-synt_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       between the Swiss Institute of Bioinformatics Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- CATALYTIC ACTIVITY: ATP + L-leucine + tRNA(Leu) = diphosphate + L-leucyl-tRNA(Leu).
-!- SUBUNIT: SEEMS TO CONSIST OF AN ALPHA CHAIN AND A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nature 392:353-358(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aeolicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SYLA_AQUAE
                                                                                                                                                                                                                                                                                                                                 Complete
                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PR00985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-VF5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacteria; Aquificae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aquifex aeolicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Leucyl-tRNA synthetase alpha subunit ligase alpha subunit) (LeuRS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "The complete genome of the hyperthermophilic bacterium Aquifex aeolicus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=63363;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LEUS OR AQ_351.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: Cytoplasmic.
SIMILARITY: BELONGS TO CLASS-I AMINOACYL-TRNA SYNTHETASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NLTCPAC
                                                                                                                                                             NTTCPKC
                                                                                                                                                                                           NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P96142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AE000685;
                                                                                                                                                                                                                                                                                                                               proteome.
                                                                                                                                                                                                                                                                                               634 AA;
(Rel. 32, Created)
(Rel. 35, Last sequence up
(Rel. 41, Last annotation
                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Rel. 39, Last sequence up
(Rel. 40, Last annotation
                                                                                                                                                                                           10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90
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                                                                       STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAC06643.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                     TRNASYNTHLEU
                                                                                                                                                                                                                                                                                                 51
73989
                                                                                                                                                                                                                                             76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Leu-tRNAsyntla.
tRNA-synt_la.
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                                                                                                                                                                                                                                                                                                 MW.
                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                               Score 30; Pred. No.
                                                                                                                                                                                                                                                                                                 "HIGH" REGION..
0119CA3F7A018766 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (class);
                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AN ALPHA CHAIN AND A BETA CHAIN
                     update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         update)
(EC 6.1.1.4)
                                                                       745
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                                                                                                                                                                                                                                                               DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         There are no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aquificales;
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                                                                                                                                                                                                                                               5e+02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 w.G.,
                                                                                                                                                                                                                                                               Length 634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aujay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Leucine--tRNA
                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aquificaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         restrictions
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A.L.,
Huber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             outstation
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update)

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RA Theologis A., Ecker J.R., Palm C.J., Federspiel N.A., Kaul S.,
RA White O., Alonso J., Altafi H., Araujo R., Bowman C.L., Brooks S.Y.,
RA Buehler E., Chan A., Chao Q., Chen H., Cheuk R.F., Chin C.W.,
RA Buehler E., Chan A., Chao Q., Chen H., Cheuk R.F., Chin C.W.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung M.K., Conn L., Conway A.B., Fong B., Fujii C.Y.,
RA Hunter J.L., Jenkins J., Johnson-Hopson C., Khan S., Khaykin E.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Militscher J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
RA Militscher J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
RA Ali Sakano H., Salzberg S.L., Schwartz J.R., Shinn P., Southwick A.M.,
RA Sakano H., Tallon L.J., Tambunga G., Toriumi M.J., Town C.D.,
RA Sakano H., Van Aken S., Vaysberg M., Vysotskaia V.S., Walker M.,
"Sequence and analysis of chromosome 1 of the plant Arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homeobox protein GLABRA2 (Homeobox-leucine zig
(HD-ZIP protein ATHB-10).
GL2 OR AT1G79840 OR F19K16.20.
Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryo
Spermatophyta; Magnoliophyta; eudicotyledons;
                                                                                            between the Swiss Institute of Bioinformatics the European Bioinformatics Institute. There a use by non-profit institutions as long as a modified and this statement is not removed. Us entities requires a license agreement (See http or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=cv. Columbia;
MEDLINE=21016719; PubMed=11130712;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "The Arabidopsis Athb-10 (GLABRA2) is an HD-Zip protein required for regulation of root hair development.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-96407838; PubMed-8811855; di Cristina M., Sessa G., Dolan L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                trichome development in Arabidopsis."; Genes Dev. 8:1388-1399(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=cv. Wassilewskija; TISSUE=Seedling; MEDLINE=95011550; PubMed=7926739;
                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                           Nature 408:816-820(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                              thaliana.";
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                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "The GLABRA2 gene encodes a homeo domain protein required for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=3702;
                                                                                                                                                                                                                                                         TISSUE SPECIFICTTY: EXPRESSED IN DEVELOPING TRICHOMES SIMILARITY: BELONGS TO THE HD-ZIP HOMEDBOX FAMILY. SIMILARITY: CONTAINS 1 HOMEDBOX DOMAIN.
SIMILARITY: CONTAINS 1 START DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                FUNCTION: REQUIRED FOR CORRECT MORPHOLOGICAL DEVELOPMENT MATURATION OF TRICHOMES AS WELL AS FOR NORMAL DEVELOPMENT COAT MUCILAGE.
                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Nuclear (Probable).
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P01367; 1#
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                                     L32873; AAC80260.1; -
Z54356; CAA91183.1; A
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                                                                                       This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Exthe European Bioinformatics Institute. There are no restruce by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use by non-profit institutions as long as its content use of the long as its conte
                                                                                                                                                                                                                                                                                        Watanabe T.K., Katagiri T., Suzuki M., Shimizu F., Fujiwara T., Kanemoto N., Nakamura Y., Hirai Y., Maekawa H., Takahashi E.; "Cloning and characterization of two novel human cDNAs (NELL1 and NELL2) encoding proteins with six EGF-like repeats."; genomics 38:273-276(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NELL_HUMAN STANDARD; PRT; 810 AA. 092832; 09Y472; 01-NOV-1997 (Rel. 35, Created) 16-OCT-2001 (Rel. 40, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Protein kinase C-binding protein NELL1 precursor (NEL-like (Nel-related protein 1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Brain; MEDLINE=97131504; PubMed=8975702;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ting K., Vastardis H., Mulliken J.B.,
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PS50848; START; 1.
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entities requires a license agreement (S or send an email to license@isb-sib.ch).

(See http://www.isb-sib.ch/announce/

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EMBL; D83017; BAA11680.1; -
EMBL; U57523; AAB06946.1; A
HSSP; P07204; 1ADX.
Genew; HGNC:7750; NELL1.
MIM; 602319; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART;
SMART;
SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00010; ASX_HYDROXYL;
PROSITE; PS00022; EGF_1; 1.
PROSITE; PS01186; EGF_2; 3.
PROSITE; PS01187; EGF_CA; 3.
PROSITE; PS01208; VWFC; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              n; PF00008; EGF; 4.
n; PF00093; VWC; 3.
n; PF02210; TSPN; 1.
RT; SM00179; EGF_CA; 2.
RT; SM00001; EGF like; 4.
RT; SM00282; LamG; 1.
RT; SM00210; TSPN; 1.
RT; SM00214; VWC; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EGF-11
     ΑĄ;
                                                 TSPN.
     89606
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EGF-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Laminin_G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EGF_Ca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           domain;
     WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALT_FRAME
                  In; Repeat; Signal.

POTENTIAL.

POTENTIAL

P
-> D (IN REF. 2).

-> H (IN REF. 2).

-> C (IN REF. 2).

549465EA3F7AEEDO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CALCIUM-BINDING
     CRC64;
                                                                                           (POTENTIAL)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (POTENTIAL)
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В
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Best Local S
Matches 4
     Pfam; PF00008; EGF; 4.
Pfam; PF000093; VWC; 3.
Pfam; PF02210; TSSN; 1.
SMART; SM00179; EGF_CA; 2.
SMART; SM00201; EGF_like;
SMART; SM00282; LamG; 1.
SMART; SM00210; TSSN; 1.
SMART; SM00214; VWC; 4.
PROSITE; PS000124; VWC; 4.
PROSITE; PS000010; ASX_HYIPROSITE; PS001022; EGF_L;
PROSITE; PS01186; EGF_L;
PROSITE; PS01187; EGF_CA;
PROSITE; PS01187; EGF_LA;
PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEL1_RAT
Q62919;
01-NOV-1997 (Re:
30-MAY-2000 (Re:
15-JUN-2002 (Re:
Protein kinase (
                                                                                                                                                                                                                                                                                                                                                        InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                                                                                                            InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a celebrate the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and the modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
STRAIN-Spraque-Dawley; TISSUE-Brain;
MEDLINE-20017976, PubMed-10548494;
Kuroda S., Oyasu M., Kawakami M., Kai
Abe T., Matsuhashi S., Ting K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entities requires a license agreement or send an email to license@isb-sib.ch
                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NELL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                       rPro; IPR000152; /
rPro; IPR000561; I
rPro; IPR001881; I
rPro; IPR001791; I
rPro; IPR003129; J
rPro; IPR001007; V
; PF00008; EGF; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NHTCPTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      U48246; AAC72252.1; -. P35555; 1EMN.
SPN; 1.

VWC; 4.

J; ASX_HYDROXYL; 3.

22; EGF 1; 1.

186; EGF 2; 3.

1187; EGF CA; 3.

J1208; VWFC; 2.

2n; EGF 11ke domair

1 16

17

1810

81

230

273

331

390
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(Rel. 39, Last sequence update)
(Rel. 41, Last annotation update)
ase C-binding protein NELL1 precursor (NEL-11ke protein 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                        Laminin_G.
TSPN.
VWF_C.
                                                                                                                                                                                                                                                                                                                                                                                                               Asx_hydroxyl.
EGF-like.
EGF_Ca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76.9%;
57.1%;
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         POTENTIAL.

PROTEIN KINASE C-BINDING E
TSP N-TERMINAL.

VWFC 1.

VWFC 2.
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                  Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kanayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (See http://www.isb-sib.ch/announce/
                                                                                                  Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           There are no restrictions ng as its content is in ved. Usage by and for con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Euteleostomi;
; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of.
                                                                  PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Saito
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   collaboration -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in no way commercial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
DO
                                                                                                                                                                                                                                                         01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Protein kinase C-binding protein NELL2 prec
(Nel-related protein 2).
NELL2 OR NRP2.
                                                                                                                                                                                                                                                                                                                                                               NEL2_HU
Q99435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
CARBOHYD
                   SEQUENCE FROM N.A.

TISSUB-Brain;

MEDLINE-97131504; PubMed-8975702;

Watanabe T.K., Katagiri T., Suzuki M., Shimizu F., Fujiwara Watanabe T.K., Katagiri T., Suzuki M., Shimizu F., Fujiwara Watanabe T.K., Katagiri T., Maekawa H., Takahashi E. "Cloning and characterization of two novel human cDNAs (NELL2) encoding proteins with six EGF-like repeats.";

Genomics 38:273-276(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                               NCBI_TaxID=9606;
[1]
                                                                                                                                                                                                            Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                             Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 57.
les 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 NXXCPXC
        N-TERMINAL DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                 HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NRTCPTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WW.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EGF-LIKE 1.

EGF-LIKE 2, CALCIUM-B
EGF-LIKE 3.

EGF-LIKE 4.

EGF-LIKE 5, CALCIUM-B
EGF-LIKE 6, CALCIUM-B
EGF-LIKE 1, CALCIUM-B
EGF-L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 30; I
Pred. No. 1
                                                                                                                                                                                                          Craniata; Vertebrata; Catarrhini; Hominidae,
                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                           n update)
,2 precursor
                                                                                                                                                                                                                                                                                                                                                                                 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              υВ ⊥,
⊥.7e+02;
3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
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                                                                                                                                                                                                                                                                                                                                                                                 ₽
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                                                                                                                                                                                                            Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CRC64;
                                                                                                                                                                                                                                                                                           (NEL-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (POTENTIAL)
                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                            Homo
                                                                      (NELL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL).
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                                                                                                                                                                                                                                                                                             protein
                                                                                           . <sub>.</sub>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                        and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
        Genew; no. 1P
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glycoprotein;
SIGNAL
CHAIN
                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART;
SMART;
SMART;
SMART;
   DISULFID
DISULFID
DISULFID
DISULFID
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DISULFID
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DISULFID
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PROSITE: PS00022; EGF_1; 1.
PROSITE: PS01186; EGF_2; 4.
PROSITE: PS01187; EGF_CA; 3.
PROSITE: PS01208; VWFC; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        between the Swiss Institute of Bioinformat
the European Bioinformatics Institute. The
use by non-profit institutions as long
modified and this statement is not removed.
entities requires a license agreement (See
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beckmann G., Hanke J., Bork P., Reich J.;
"Merging extracellular domains: fold prediction for laminin G-like and amino-terminal thrombospondin-like modules based on homology and pentraxins.";
J. Mol. Biol. 275:725-730(1998).
-!- SUBUNIT: HOMOTRIMER. BINDS TO PKC BETA-1 (BY SIMILARITY).
-!- SUBULILLAR LOCATION: Secreted (By similarity).
-!- SIMILARITY: CONTAINS 1 TSP N-TERMINAL DOMAIN.
-!- SIMILARITY: CONTAINS 5 VWFC DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; D83018; BAA11681.1; HSSP; P00740; 1EDM.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=98153258; PubMed=9480764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  n; PF00093; vwc; 3.
n; PF02210; TSPN; 1.
r; SM00179; EGE_CA; 3.
r; SM00201; EGE_like; 3.
r; SM00202; LamG; 1.
r; SM00210; TSPN; 1.
r; SM00214; VWC; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF00008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HGNC:7751; NELL2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IPR000152;
IPR000561;
IPR001881;
IPR001791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IPR003129;
IPR001007;
     EGF-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EGF;
     TSPN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Asx_hydroxyl.
EGF-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Laminin_G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EGF_Ca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .'
PROTEIN KINASE C-BINDING P
PROTEIN KINASE C-BINDING P
VWFC 1.

VWFC 2.

EGF-LIKE 1.

EGF-LIKE 2, CALCIUM-BINDIN
EGF-LIKE 3,

EGF-LIKE 4.

EGF-LIKE 6, CALCIUM-BINDIN
EGF-LIKE 6, CALCIUM-BINDIN
EGF-LIKE 5, CALCIUM-BINDIN
EGF-LIKE 7, CALCIU
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Title:
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                                                                            Database :
                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 1008
Listing first 45 summaries
                                                                                                                                                                                    Minimum DB seq length: 0
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Gapop 10.0 , Gapext 0.5
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PIR_73:*
1: pir1:*
2: pir2:*
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39
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	თ	S	4	ω	2	<b>J</b> 1		. '
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gene D13 protein -	variant-specific s	ന	gene 18 protein -	hypothetical prote	$\circ$		n			ical		=		thetical prot	type IV prepilin p	coat protein - tob			·	B 1	hypothetical prote			hypothetical prote	<b>-</b>		ω	cytochrome-c3 hydr	nescription	7

# ALIGNMENTS

Query Match 79.5%; Score 31; DB 2; Length 367; Best Local Similarity 57.1%; Pred. No. 4.1e+02; Matches 4; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	A;Status: preliminary A;Molecule type: DNA A;Residues: 1-367 <kaw> A;Cross-references: GB:AJ248285; GB:AL096836; NID:g5458067; PIDN:CAB49782.1; PID:g545-A;Cross-references: strain Orsay C;Genetics: A;Gene: PAB1784 C;Superfamily: Pyrococcus furiosus cytochrome-c3 hydrogenase alpha chain C;Keywords: oxidoreductase</kaw>	E75133 Cytochrome-c3 hydrogenase (EC 1.12.2.1) beta chain PAB1784 - Pyrococcus abyssi (strai C;Species: Pyrococcus abyssi (c;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Jun-2000 C;Accession: E75133 R;anonymous, Genoscope submitted to the EMBL Data Library, July 1999 A;Description: Pyrococcus abyssi genome sequence: insights into archaeal chromosome s A;Reference number: A75001 A;Accession: E75133	8 7 4	RESULT 1 \$48833  cytochrome-c3 hydrogenase (EC 1.12.2.1) alpha chain - Pyrococcus furiosus C;Species: Pyrococcus furiosus C;Date: 10-Dec-1994 #sequence_revision 13-Mar-1997 #text_change 09-Jun-2000 C;Accession: \$48833 R;Pedroni, P. submitted to the EMBL Data Library, September 1993 A;Accession: \$48833 A;Accession: \$48833 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-367 <ped> A;Cross references: EMBL:X75255; NID:g562773; PID:g563905 C;Genetics: A;Start codon: GTG C;Superfamily: Pyrococcus furiosus cytochrome-c3 hydrogenase alpha chain C;Keywords: oxidoreductase</ped>

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hypothetical protein B - Proteus vulgaris C;Specles: Proteus vulgaris C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 20-Sep-1999 C;Accession: S00118 R;Cole, S.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Reference number: A96900; MUID:21359325; PMID:21359325 A;Accession: H97289
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R;Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R. J. Bacteriol. 183, 4823-4838, 2001

A;Title: Genome Sequence and Comparative Analysis of the A;Title: Genome Sequence A;Title:
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A; Molecule type: DNA
A; Residues: 1-534 <WIL>
A; Cross-references: EMBL: Z98866; PIDN: CAB11566.1; GSPDB: GN00021; CESP: Y49E10.20
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C; Superfamily:
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A; Residues: 1-552 <KUR>
A; Cross-references: GB:
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A; Introns: 42/3; 105/2; C; Superfamily: lysosomal
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A;Reference number: 220303
A;Accession: T27054
A;Status: preliminary; translated from
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57.1%;
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4 NXXCPXC 10

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C;Accession: F88765
C;Accession: F88766
C;Caccession: F88766
C;Caccession: F88766
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating bio A;Title: Genome sequence of the nematode C. pMID:9891916
A;Rote: Genome sequence MID:99069613; PMID:981916
A;Rote: See websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_A;Rote: See websites genome.wustl.edu/gsc/C_Elegans/ and www_sanger.ac.uk/Project
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F88765
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A;Map position: 4
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A; Residues: 1-117 <STO>
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C;Accession: F88765
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                                                                                                                                                      A; Gene:
                                                                                                                                                                                                           A; Cross-references:
                                                                                                                                                                                                                                                                                                   A; Status: preliminary
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C; Species: Caenorhabditis elegans
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A; Residues: 1-117 <W
A; Cross-references:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Experimental source: clone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           submitted to the EMBL Data A; Reference number: Z20030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Lloyd,
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A; Residues: 1-113 <COL>
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A; Title: Nucleotide sequence and comparative analysis of
Matches
                               Query Match
Best Local
                                                                                                                                                                                  Genetics
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Best Local
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nes 4; Conserv
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Similarity 4; Conserv
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                                                                                                                                                                                                              GB:chr_IV;
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57.1%;
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Score 30; DB
Pred. No. 2.9e
0; Mismatches
   0;
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Pred. No. 2.9e+02;
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                               DB 2;
2.9e+02;
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B72782

Bypothetical protein APE0243 - Aeropyrum pernix (strain K1)

C;Species: Aeropyrum pernix

C;Species: Aeropyrum pernix

C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jun-2000

C;Accession: B72782

R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, M.; Masuda, M.; Masuda, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, awa, M.; Masuda, 
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A; Molecule type: DNA
A; Residues: 1-144 <HEI>
A; Residues: 1-144 <HEI>
A; Cross-references: GB: AE004403; GB: AE003853; NID: g9658159;
A; Cross-references: Serogroup O1; Strain N16961; biotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Chardson, D.; Ermolaeva, M.D.; Vamathevan, J.J.; Bass, S.; Qin, I., R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 405, 477-483, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Vibrio cholerae
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Feb-2001
C;Accession: B82423
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A;Introns: 19/3; 52/3
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C; Superfamily: thioredoxin; thioredoxin
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A; Residues: 1-118 <WIL>
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Pred. No. 3.3e+02; 3;
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Pred. No.
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3e+02;
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El Tor
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H.; Dragoi,
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                                                                                                 Takal
                                                                                                                                                                   C;Accession: D82361
R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, J., R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
                       A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae A;Reference number: A82035; MUID:20406833; PMID:10952301 A;Accession: D82361 A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                              C;Species: Vibrio cholerae
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                            conserved hypothetical protein VC0131 [imported] - Vibrio cholerae (strain N16961 ser
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A; Molecule type: DNA
A; Residues: I-165 < AND>
A; Residues: I-165 < AND>
A; Residues: I-165 < AND>
A; Experimental source: strain $288C
A; Experimental source: strain $288C
R; Urrestarazu, L.A.; Andre, B.; Vissers, S.
submitted to the Protein Sequence Database, July 1996
A; Reference number: $67535
A; Recession: $67540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, R;Reference number: A72450; MUID:99310339; PMID:10382966
A;Recession: B72782
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-148 <KAM>
A;Residues: 1-148 <KAM>
A;Cross references: DDBJ:AP000058; NID:g5103388; PIDN:BAA79156.1; PID:d1042932; FA;Experimental source: strain K1
RESULT
D82361
                                                                                                                                                                                                                                                                         A; Nolecule type: DNA
A; Molecule type: DNA
A; Residues: 1-165 <URR>
A; Cross-references: EMBL:274056; NID:g1430968; PIDN:CAA98564.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Andre, B.; Vissers, S.; Urrestarazu, L. submitted to the EMBL Data Library, February 1995 A;Description: The sequence of a 42 kb segment located
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Species: Saccharomyces cerevisiae
C;Date: 08-May-1995 #sequence_revision
C;Accession: S52511; S67540
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C;Superfamily: Aeropyrum
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A;Cross-references:
A;Map position: 4L
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Dodson, R. I.; Sellers

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type IV prepilin peptidase (EC 3.4.99.-) pilD - Pseudomonas aeruginosa N;Alternate names: inner membrane protein xcpA N.Contains: type IV pilin N-methyltransferase (EC 2.1.1.-) C:Species: Pseudomonas aeruginosa C:Species: Pseudomonas aeruginosa C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 31-Dec C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 31-Dec C:Accession: A39131; C35384; D83078 R:Bally, M.; Ball, G.; Badere, A.; Lazdunski, A. J. Bacteriol. 173, 479-486, 1991
                                                                                             A;Cross-references: GB:M61096; GB:M38720; NID:g151641; PIDN:AAA26023.1; PID:g151642 R;Nunn, D.; Bergman, S.; Lory, S. J. Bergman, 2911-2919; Nide and pilo and pilo, are required for la;Title: Products of three accessory genes, pilb, pilo, and pilo, are required for la;Reference number: A35384; MUID:90264276; PMID:1971619
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C; Superfamily: tobacco sta
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Nuccleic Acids Res. 12, 2427-2437, Partitle: Complete nucleotide sequence of tobacco streak virus RNA
A;Reference number: A93507; MUID:84169544; PMID:6546793
A;Accession: A04206
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A; Residues: 1-198 <HEI>
A; Cross-references: GB:
A; Molecule type: DNA
A; Residues: 1-17, 'A', 19-290 <NUN>
A; Cross-references: GB: M32066; NID:g151064; PIDN:AAA25734.1; PID:g151067
                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-290 <BAL>
                                                                                                                                                                                                                                                                                              A;Reference number: A39131;
A;Accession: A39131
A;Status: preliminary
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C;Date: 20-Aug-1985 #sequence_revision 28-Aug-1985 #text_change 23-Jul-1999
C;Accession: A04206
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N;Alternate names: P4 protein
C;Species: tobacco streak virus, TSV
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C; Superfamily: Escherichia coli hypothetical protein b2583
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                                                                              A;Status: preliminary
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A; Residues: 1-237 <COR>
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Search completed: December 13, Job time: 4.91411 secs

2002, 08:40:10

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A; Molecule type: DNA
A; Residues: 1-297 <AFO>
A; Cross-references: EMBL: AF063866; NII
A; Cross-references: isolate Tuscon
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                                                                                                                                                    C; Superfamily: RING finger homology F; 248-296/Domain: RING finger homology
                                                                                                                                                                                                                                                                                                                           R;Afonso, C.L.; Tulman, E.R.; Lu, Z.; Oma, E.; Kutish, G.F.; Rock, D.L. J. Virol. 73, 533-552, 1999
A;Title: The genome of Melanoplus sanguinipes entomopoxvirus.
A;Reference number: 220484; MUID:99102612; PMID:9847359
A;Accession: T28188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypothetical protein ORF29 · Melanoplus sanguinipes entomopoxvirus (isolate Tuscon) N;Alternate names: ORF MSV027 tryptophan repeat gene family protein C;Species: Melanoplus sanguinipes entomopoxvirus
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C;Superfamily: type IV prepilin peptidase
C;Keywords: hydrolase; methyltransferase; S-adenosylmethionine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Note: the authors translated the codon AAC for residue 30 as Ala R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
                                                                                                                                                                                             A; Note: MSV027
                                                                                                                                                                                                                                                                                                         A; Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession: T28188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Variety: isolate Tuscon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Experimental source: strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-290 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: D83078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: Complete genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:AE004867; GB:AE004091; NID:g9950769;
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K.R.; Kas,
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Result
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Perfect score:
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 Pending_Patents_AA_New: *
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cgn2_6/ptodata/1/paa/USOf_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO7_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO8_NEW_COMB.pep:*
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US-10-125-923A-222
US-110-124-575-222
US-110-174-575-222
US-10-174-676-78298
US-09-724-676A-78298
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Sequence 295, App
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Sequence 222, App
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Sequence 78297, A
Sequence 78297, A
Sequence 78298, A
Sequence 78521, A
Sequence 48, Appl
Sequence 14, Appl
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Sequence 42, Appl
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Baker, Kevin P.
                                                        Fong, Sherman
                            Gerritsen, Mary E.
                                            Gerber, Hanspeter
                                                                                           Eaton, Dan L.
                                                                                                        Desnoyers, Luc
                                                                                                                       Botstein, David
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Sequence 1, Appli	Segi	US-09-701-080C-1	u	12	71.8	28	45
Sequence 2, Appli	Seq	US-10-231-778-2	9	813	74.4	29	44
Sequence 5060, Ap	Sequ	US-10-092-411A-5060	σ	723	74.4	29	43
Sequence 62865, A	Seq	US-09-724-676A-62865	ر ح	662	74.4	29	42
Sequence 62865, A	Seq	US-09-724-676-62865	ъ	662	74.4	29	41
Sequence 62862, A	Seq	US-09-724-676A-62862	ر.	649	74.4	29	40
Sequence 62862, A	Seq	US-09-724-676-62862	ъ	649	74.4	29	39
Sequence 62864, A	Seq	US-09-724-676A-62864	σ	642	74.4	29	38
Sequence 62864, A	Seq	US-09-724-676-62864	ر.	642	74.4	29	37
Sequence 62863, A	Seq	US-09-724-676A-62863	ψ	636	74.4	29	36
Sequence 62863, A	Seq	US-09-724-676-62863	G	636	74.4	29	35
Sequence 2355, Ap	Segi	US-10-264-237-2355	თ	452	74.4	29	34
Sequence 5436, Ap	Seq	US-10-092-411A-5436	σ	368	74.4	29	33
Sequence 71193, A	Seq	US-09-724-676A-71193	ψ	358	74.4	29	32
Sequence 71193, A	Seq	US-09-724-676-71193	Ç	358	74.4	29	31
Sequence 8, Appli	Seq	US-10-288-160-8	φ	297	74.4	29	30
	Seq	US-60-425-113-62	7	139	74.4	29	29
Sequence 49, Appl	Seq	US-60-425-113-49	7	136	74.4	29	28
Sequence 26222, A	Seq	US-10-057-498-26222	σ	LLI	14.4	29	7.

ALIGNMENTS

#### ; LOCATION: 16 ; OTHER INFORMATION: Xaa=Gly or US-09-513-999C-7264 NUMBER OF SEQ ID NOS: 36681 SOFTWARE: Patent.pm SEQ ID NO 7264 LENGTH: 84 TYPE: PRT Sequence 7264, Application US/09513999C GENERAL INFORMATION: APPLICANT: Dunas Milne Edwards, J.B. APPLICANT: Duclert, A. APPLICANT: Giordano, J.Y. APPLICANT: Giordano, J.Y. TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. FILE REFERENCE: 59.US2.REG CURRENT APPLICATION NUMBER: US/09/513,999C CURRENT EILING DATE: 2000-02-24 PRIOR APPLICATION NUMBER: US 60/122,487 PRIOR FILING DATE: 1999-02-26 ORGANISM: Homo sapiens FEATURE: NAME/KEY: UNSURE 4 NXXCPXC 10 Similarity 4; Conserv Conservative 76.9%; 57.1%; Score 30; DB Pred. No. 1.7e. 0; Arg DB 5; Lu., 1.7e+02; 3; Length 84; Indels 0 Gaps

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APPLICANT:

Grimaldi, J. Christopher Gurney, Austin L.

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US-09-992-643-295
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US-09-989-733-295
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PRIOR FILING DATE: 1997-06-16
PRIOR PELICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
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LENGTH: 237
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CURRENT APPLICATION NUMBER: US/09/989,733
CURRENT FILING DATE: 2001-11-01
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4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            Ashkenazi, Avi J.
                                                                  Goddard, Audrey
Godowski, Paul J.
                                                                                                                                     Gerber, Hanspeter
Gerritsen, Mary E.
Gurney, Austin L.
                                   Grimaldi, J.Christopher
                                                                                                                                                                                                                                       Ferrara, Napoleone
                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watanabe, Colin K. Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                       Fong,Sherman
                                                                                                                                                                                                                                                                          Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                     Botstein, David
                                                                                                                                                                                                                                                                                                                                                                            Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09992643
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napier, Mary A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-28
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57.1%;
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Pred. No. 3e+02;
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Best Local S
Matches 4
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APPLICANT: Baker, Kevin P.
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LENGTH: 237
                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
             TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C79

CURRENT APPLICATION NUMBER: US/10/125,923A

CURRENT FILING DATE: 2002-01-15

CURRENT FILING DATE: 2002-01-15
                                                                                                              APPLICANT:
                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                        APPLICANT:
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CURRENT FILING DATE: 2001-11-01
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
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PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/084600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/065186
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Acids Encoding FILE REFERENCE: P2730P1C13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
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NUMBER OF SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-02-25
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PRIOR APPLICATION NUMBER: 10/052586
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                                                                                                                                               Smith, Victoria
Watanabe, Colin K.
                                                                                                              Zhang, Zemin
                                                                                                                                Wood, William I.
                                                                                                                                                                                         Pan,James
                                                                                                                                                                                                        Godowski, Paul J. Gurney, Austin L.
                                                                                                                                                                                                                                            Goddard, Audrey
                                                                                                                                                                                                                                                                  Desnoyers,Luc
                                                                                                                                                                                                                                                                                     Chen, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Watanabe, Colin K. Williams, P. Mickey
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Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                       Application US/10125923A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application data removed - See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOS: 532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76.98;
57.18;
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Pred. No. 3e+C
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 5;
3e+02;
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                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/205,892
CURRENT FILING DATE: 2002-07-26
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR APPLICATION NUMBER: 60/059266
PRIOR APPLICATION NUMBER: 60/059266
PRIOR PPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
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LENGTH: 237
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PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C517
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                                                                                                                                            PRIOR APPLICATION NUMBER: 60/063120 PRIOR FILING DATE: 1997-10-24
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                                                                                                  APPLICATION NUMBER: 60/063121 FILING DATE: 1997-10-24
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FILING DATE: 1997-10-21
APPLICATION NUMBER: 60/063540
FILING DATE: 1997-10-28
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FILING DATE: 1997-10-24
APPLICATION NUMBER: 60/063121
FILING DATE: 1997-10-24
                                                        APPLICATION NUMBER: 60/063486 FILING DATE: 1997-10-21
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FILING DATE: 1997-09-18
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APPLICATION NUMBER: 60/063541
                   APPLICATION NUMBER: 60/063540 FILING DATE: 1997-10-28
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Gurney,Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang,Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watanabe, Colin K. Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Desnoyers, Luc
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57.1%;
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Pred. No.
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3e+02;
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RESULT 6
US-10-174-575-222
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                                                                          ; ORGANISM: Homo Sapien US-10-174-575-222
                                                                                                                            Remaining Prior Ap
NUMBER OF SEQ ID N
SEQ ID NO 222
LENGTH: 237
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PRIOR FILING DATE: 1997-10-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 222
LENGTH: 237
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 Matches
                 Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/174,575
CURRENT FILING DATE: 2002-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-10-28
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TYPE: PRT
                                                                                                               TYPE: PRT
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OR FILING DATE: 1997-09-18
OR APPLICATION NUMBER: 60/06250
OR FILING DATE: 1997-10-17
OR APPLICATION NUMBER: 60/063120
OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063121
OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063486
OR APPLICATION NUMBER: 60/063486
OR FILING DATE: 1997-10-28
OR APPLICATION NUMBER: 60/063540
OR FILING DATE: 1997-10-28
OR FILING DATE: 1997-10-28
OR FILING DATE: 1997-10-28
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                                                                                                                                                                                                                          APPLICATION NUMBER: 60/063544
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57.1%;
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                   Score 30; DB 6;
Pred. No. 3e+02;
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NAECPAC 128

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RESULT 8
US-09-724-676-78297
US-09-724-676-78297
Sequence 78297, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 78297
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NUMBER OF SEQ ID N
SEQ ID NO 222
LENGTH: 237
TYPE: PRT
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PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
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APPLICANT:
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OR APPLICATION NUMBER: 60/063486
OR FILING DATE: 1997-10-21
OR APPLICATION NUMBER: 60/063540
OR FILING DATE: 1997-10-28
OR APPLICATION NUMBER: 60/063541
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Godowski, Paul J.
Gurney, Austin L.
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APPLICANT: Compugen LTD

TITLE OF INVENTION: Variants of alternative spl
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 78297
LENGTH: 332
TYPE: PRT
ORGANISM: Homo sapiens
US-09-724-676A-78297
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US-09-724-676A-78297
; Sequence 78297, Appl
; GENERAL INFORMATION:
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US-09-724-676A-78298
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TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CUGRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 78298
LENGTH: 332
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Sequence 78298, Application US/09724676A GENERAL INFORMATION:
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Best Local Similarity
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Pred. No. 3.6e+02;
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APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative FILE REFERENCE: 129181.4 Compugen

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APPLICANT: Compugen LTD

ITILE OF INVENTION: Variants of alternative splicing

FILE REFERENCE: 129181.4 Compugen

CURRENT APPLICATION NUMBER: US/09/724,676

CURRENT FILING DATE: 2000-11-28

NUMBER OF SEQ ID NOS: 97222

SOFTMARE: Patentin version 3.2

SEQ ID NO 78522

LENGTH: 550

TYPE: PAT

ORGANISM: Homo sapiens

US-09-724-676-78522
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US-09-724-676-78522
Sequence 78522, Application US/09724676
GENERAL INFORMATION:
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US-09-724-676A-78522
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RESULT 14
US-09-724-676-78521
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TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 78522
LENGTH: 550
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Best Local :
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Pred. No. 4.8e+02;
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; APPLICANT: Compugen LTD
; TITLE OF INVENTION: Variants of alternative splicing
; TITLE OF INVENTION: Variants of alternative splicing
; TITLE REFERENCE: 129181.4 Compugen
; CURRENT APPLICATION NUMBER: US/09/724,676
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 97222
; SOFTWARE: PatentIn version 3.2
; SEO ID NO 78521
; LENGTH: 555
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-724-676-78521
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Search completed: December 13, Job time: 1.91411 secs
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US-09-724-676A-78521
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                                                                                                                                                                                                                                                                  SEQ ID NO 78521
LENGTH: 555
TYPE: PRT
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                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                          224 NHTCPTC 230
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Local Similarity 57.1%;
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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### SUMMARIES

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79 79 82 82 82 243 339	Query Match Length DB ID
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21 US-09-733-089-23902 22 US-09-816-660-23902 21 US-09-733-089-20004 22 US-09-816-660-20004 25 US-10-155-881-9389 25 US-10-155-881-9389	ID
Sequence 23902, A Sequence 23902, A Sequence 20004, A Sequence 20004, A Sequence 9389, Ap Sequence 29457, A	Description

Query Match

79.5%;

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Ge 5	ce 33	e 15442,	ce 15442,	ce 65176	e 3697, 1	equence 6234,	equence 6368,	equence 34013	equence 924, Ap	equence 340	e 22620,	514	5145,	5072,	16156,	20832,	6413,	34015,	58790,	5237,	5237, A	58791	15530,	15530,	22445,	925,	5073,	e 587	equence 260,	e 260, A	equence 7377, A	Sequence 51491,	3, Appl	e 3650,	equence 22	e 5906,	equence 15

## ALIGNMENTS

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APPLICANT: LUTEIVAN, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Lutiya, Linda L.
APPLICANT: Lutiya, Linda L.
APPLICANT: Lutiya, Linda L.
APPLICANT: McIninch, James
APPLICANT: Wu, Wei
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
TITLE OF INVENTION: Transcription In Plants
FILE OF INVENTION NUMBER: US/09/733,089
CURRENT APPLICATION NUMBER: US/09/733,089
CURRENT FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 24143
SEQ ID NO 23902
LENGTH: 79
TYPE: PRT
CDCANTCM: CTUTA CATTUR
US-09-733-089-23902
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APPLICANT: Lutflya, Linda L.

APPLICANT: Mu, Wei
APPLICANT: Wu, Wei
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
TITLE OF INVENTION: Transcription In Plants
FILIR REFERENCE: 38-21(15300)D
CURRENT APPLICATION NUMBER: US/99/816,660
CURRENT APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR FILING DATE: 1999-12-28
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: US 09/54,617
PRIOR APPLICATION NUMBER: US 09/54,617
PRIOR APPLICATION NUMBER: US 09/54,617
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-10-10
PRIOR FILING DATE: 2000-10-10
PRIOR FILING DATE: 2000-10-10
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US-09-816-660-23902
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PRIOR FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 24143
SEQ ID NO 23902
LENGTH: 79
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                      SEQ ID NO
                                                           APPLICANT: Lufflya, Linda L.
APPLICANT: WcIninch, James
APPLICANT: WcIninch, James
APPLICANT: Wi, Wei
TITLE OF INVENTION: Transcription in Plants
FILE OF INVENTION: Transcription in Plants
FILE REFERENCE: 38-21(15300)D
CURRENT APPLICATION NUMBER: US/09/733,089
CURRENT FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-07-19
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Best Local Similarity 57.1
Matches 4; Conservative
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                                             NUMBER OF SEQ ID NOS: 24143
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1.9e+03;
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US-10-155-881-9389
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APPLICANT:
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ORGANISM: Zea mays
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; TYPE: PRT ; ORGANISM: Oryza sativa US-09-733-089-20004
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US-09-816-660-20004
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Best Local Similarity 5/...
""" Arches 4; Conservative
FILE REFERENCE: 38-21(15300)J
CURRENT APPLICATION NUMBER: US/IC
CURRENT FILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 9389
LENGTH: 243
                                                                                                                                                                                                                                                                                          Sequence 9389, Application US/10155881 GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                 APPLICANT: Dotson, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Lutfiyya, Linda L.
APPLICANT: MCIninch, James
TITLE OF INVENTION: WICLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With TITLE OF INVENTION: Transcription In Plants FILE REFERENCE: 38-21(15300)D CURRENT APPLICATION NUMBER: US/09/816,660 CURRENT FILING DATE: 2001-03-26 CURRENT FILING DATE: 2001-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: ) US 09/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 24143
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McIninch, James
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57.1%;
                                                                                           US/10/155,881

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Pred. No. 2e+03;
0; Mismatches
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Pred. No. 2e+03;
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GENERAL INFORMATION:
APPLICANT: Dotson, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Lutfiyya, Linda L.
APPLICANT: McIninch, James
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; ORGANISM: Oryza sativa
US-10-155-881-29457
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US-10-155-881-29457
; Sequence 29457, Application US/10155881
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RESULT 8
US-09-791-537-15887
; Sequence 15887, Application US/09791537
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; Sequence 12171, Application US/09791537
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FILE REFERENCE: 38-21(15300)J
CURRENT APPLICATION NUMBER: US/10/155,881
CURRENT FILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 29457
LENGTH: 339
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 12171
LENGTH: 367
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Best Local :
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Best Local :
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APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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                                                                                       NTTCPTC 246
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57.1%;
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Pred. No. 4.1e+03;
0; Mismatches 3
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Pred. No. 5
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Pred. No. 5.1e+03;
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RESULT 10
US-09-540-236-2296
; Sequence 2296, Applic
; GENERAL INFORMATION:
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Best Local Similarity
Thehes 4; Conserv
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; ORGANISM: Caenorhabditis elegans
US-60-360-039-5906
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APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROPERTIES OF THE REFERENCE: 38-10(52052)A
FILE REFERENCE: 38-10(52052)A
CURRENT APPLICATION NUMBER: US/60/360,039
CURRENT FILLING DATE: 2002-02-21
NUMBER OF SEO ID NOS: 47374
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US-60-360-039-5906
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 15887
                                                   CURRENT APPLICATION NUMBER: US/09/540,236
CURRENT FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 3840
SEQ ID NO 2296
SEQ ID NO 2296
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LENGTH: 534
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                            APPLICANT: GATY L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CA
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2005-001
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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TYPE: PRT
                       LENGTH: 635
TYPE: PRT
ORGANISM: M.catarrhalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240 NTTCPTC 246
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Pred. No. 6.8e+03;
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Pred. No. 5
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5.3e+03;
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RESULT 13
US-10-219-999-51491
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Best Local Similarity
Thes 5; Conserve
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PCT-US94-07194-3
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APPLICANT: Gary L. Breton et al.
APPLICANT: Gary L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA
TITLE OF INVENTION: CATARRHALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 107196.139
CURRENT APPLICATION NUMBER: US/60/128,476
CURRENT APPLICATION 1099-04-09
NUMBER OF SEQ ID NOS: 5002
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Best Local
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FILING DATE: June 29, 1993
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
TITLE OF INVENTION: CONCUMBER OF SEQUENCES: 13
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPBY d.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 635
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                  MOLECULE TYPE:
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                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: unknown
                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/
FILING DATE: 27-JUN-1994
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                                                             NAACPXC 12
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4; Conserv
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                                                                                                                                                                                                                                               19 amino acids
                                                                                                                        Conservative
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57.1%;
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71.48;
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57.1%;
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                                                                                                                        0,
                                                                                                                                     Score 30; DB 1; Length 19, Pred. No. 1.1e+03;
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                                                                                                                         Mismatches
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                                                                                                                              US-09-330-781-260
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US-60-312-544-7377
; Sequence 7377, A
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                                                                                                                                                  RESULT 15
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                                                                                        Sequence 260, Application US/09330781 GENERAL INFORMATION:
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TITLE OF INVENTION: cDNA SEQUENCES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-10(52726)C
CURRENT APPLICATION NUMBER: US/10/219,999
CURRENT FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: US 60/324,109
PRIOR FILING DATE: 2001-09-21
PRIOR APPLICATION NUMBER: US 60/312,544
PRIOR FILING DATE: 2001-08-15
NUMBER OF SEQ ID NO 51491

ENERGY OF SEQ ID NOS: 63520

SEQ ID NO 51491

LENGTH: 61
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LENGTH: 61
                                     APPLICANT:
APPLICANT:
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Best Local Similarity
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Best Local
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APPLICANT: Stein, Joshua
TITLE OF INVENTION: CDNA SEQUENCES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-1052726)A
CURRENT APPLICATION NUMBER: US/60/312,544
CURRENT FILING DATE: 2001-08-15
NUMBER OF SEQ ID NOS: 10730
   TITLE OF INVENTION:
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APPLICANT:
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APPLICANT: Edgerton, Michael D
APPLICANT: Hinkle, Gregory J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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OTHER INFORMATION: Clone ID: 701125331_FLI
                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Glycine max
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nes 4; Conserv
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Kovalic, David K.
Gearing, David P.
Robison, Keith E.
HOltzman, Douglas A.
VENTION: Nucleic Acid Molecules Derived from a
VENTION: Human Prostate Stromal Cell Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edgerton, Michael D
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57.1%;
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57.1%;
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Pred. No. 2.3e+03;
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Pred. No. 2
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CURRENT PAPPLICATION NUMBER: US/09/330,781
CURRENT PILING DATE: 1999-06-11
PRIOR APPLICATION NUMBER: 60/990,179
PRIOR APPLICATION NUMBER: 60/990,179
PRIOR FILING DATE: 1998-06-22
NUMBER OF SEQ ID NOS: 490
SOFTWARE: FRASSEQ for Windows Version 3.0
LENGTH: 73
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: (1)...(23)
US-09-330-781-260
Query Match
Best Local Similarity 57.1%; pred. No. 2.6e+03;
Matches 4; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QUY 4 NXXCPXC 10
PM 1 | | | | |
DM 49 NSQCPAC 55

Search completed: December 13, 2002, 08:44:49
Job time: 22.0982 secs
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Result
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0 seq length: 2000000000
            protein search, using sw model
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/cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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US-09-989-723-295

US-09-989-723-295

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US-09-989-731-295

US-09-989-731-295

US-09-989-731-295

US-09-989-731-295

US-09-991-073-295

US-09-991-073-295
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US-09-764-864-1291
US-09-764-864-836
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Compugen Ltd
Sequence 1289, Apsequence 1291, App sequence 295, App sequence 295
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Sequence 295,
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## ALIGNMENTS

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NAME/KEY: SITE
LOCATION: (128)
OTHER INFORMATION: Xaa ee
NAME/KEY: SITE
LOCATION: (147)
OTHER INFORMATION: Xaa ee
US-09-764-864-1289
RESULT 2
US-09-764-864-1291
; Sequence 1291, Application US/09764864
; Patent No. US20020132753A1
                                                                                                                                                                              Query Match
Best Local Similarity
Thehes 4; Conserve
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US-09-764-864-1289
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Patent No. US20020132753A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TIFLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 1792
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1289
LENGTH: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino
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                                                                                                                     27 NSQCPAC 33
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57.1%;
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Pred. No. 1.1e+02;
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RESULT 4
US-09-992-598-295
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LOCATION: (187)
OTHER INFORMATION:
US-09-764-864-1291
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/764,864
COURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 1792
SOFTWARE: Patentin Ver. 2.0
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APPLICANT:
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APPLICANT:
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TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ23
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TITLE OF INVENTION: Nucleic Acids, Proteil
FILE REFERENCE: PTZ23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.0 EQ ID NO 1291
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                                                                                                                                                   APPLICANT: Ashkenazi, Avi J.
APPLICANT:
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                        Q ID NO 836
LENGTH: 201
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                                                                                                                                                                                                                                                                    181 NSTCPIC 187
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                                       Gerritsen, Mary E.
 Grimaldi, J.Christopher
                                                                     Fong, Sherman
                                                                                  Ferrara, Napoleone
                                                                                              Eaton, Dan L.
                                                                                                            Desnoyers,Luc
                                                                                                                         Botstein,David
                                                                                                                                      Baker, Kevin P
                                                                                                                                                                                                                                                                                                                           Conservative
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Pred. No. 1.3e
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PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
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Stewart, Timothy A.
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APPLICANT:
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OR FILING DATE: 1998-06-25
OR APPLICATION NUMBER: 60/090695
OR FILING DATE: 1998-06-25
OR APPLICATION NUMBER: 60/090696
OR APPLICATION NUMBER: 60/090862
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/090863
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/091360
OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091478
OR FILING DATE: 1998-07-02
OR APPLICATION NUMBER: 60/09144
OR FILING DATE: 1998-07-02
OR APPLICATION NUMBER: 60/091519
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OR APPLICATION NUMBER: 60/091519
OR FILING DATE: 1998-07-02
OR APPLICATION NUMBER: 60/091626
OR FILING DATE: 1998-07-02
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OR APPLICATION NUMBER: 60/990542
OR FILING DATE: 1998-06-24
OR APPLICATION NUMBER: 60/090557
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/090676
OR FILING DATE: 1998-06-25
OR APPLICATION NUMBER: 60/090678
OR APPLICATION NUMBER: 60/090678
OR APPLICATION NUMBER: 60/090690
OR FILING DATE: 1998-06-25
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OR FILING DATE: 1998-06-25
OR FILING DATE: 1998-06-25
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OR APPLICATION NUMBER: 60/091978
OR FILING DATE: 1998-07-07
OR APPLICATION NUMBER: 60/091982
OR FILING DATE: 1998-07-07
OR APPLICATION NUMBER: 60/092182
OR FILING DATE: 1998-07-09
OR FILING DATE: 1998-07-09
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4; Conservative
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A
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                                                                                                       Gurney, Austin L. Kljavin, Ivar J.
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Grimaldi, J. Christopher
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Goddard, Audrey
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Eaton, Dan L.
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                                                                Pan, James
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2730P1C66
                     RENT APPLICATION NUMBER: US/09/98,293A
RENT FILING DATE: 1997-06-16
COR APPLICATION NUMBER: 60/04978
COR APPLICATION NUMBER: 60/06225
COR APPLICATION NUMBER: 60/06518
COR APPLICATION NUMBER: 60/06531
COR APPLICATION NUMBER: 60/07891
COR APPLICATION NUMBER: 60/07891
COR APPLICATION NUMBER: 60/07891
COR APPLICATION NUMBER: 60/07891
COR APPLICATION NUMBER: 60/08322
COR APPLICATION NUMBER: 60/08332
COR APPLICATION NUMBER: 60/08322
COR APPLICATION NUMBER: 60/08706
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COR APPLICATION NUMBER: 60/08760
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Watanabe,
Williams,
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PRAPPLICATION NUMBER: 60/089532

PRAPPLICATION NUMBER: 60/089538

PRAPPLICATION NUMBER: 60/089598

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PRAPPLICATION NUMBER: 60/089599

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PRAPPLICATION NUMBER: 60/089601

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PRAPPLICATION NUMBER: 60/089907

PRAPPLICATION NUMBER: 60/09024

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PRAPPLICATION NUMBER: 60/09034

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REAPPLICATION NUMBER: 60/08
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APPLICATION FILING DATE:

NUMBER: 60/ : 1998-06-25 : NUMBER: 60/ : 1998-06-25

APPLICATION NUMBER:

60/090678 5-25 60/090690 5-25 60/090694

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US-09-989-722-295
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Patent No. US20020072067A1
GENERAL INFORMATION
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OR FILING DATE: 1998-07-07
OR APPLICATION NUMBER: 60/091982
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OR FILING DATE: 1998-07-09
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FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090862
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APPLICATION NUMBER: 60/
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APPLICATION NUMBER: 60/090695
FILING DATE: 1998-06-25
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FILING DATE: 1998-07-02
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             T: Zhang, Zo INVENTION:
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Gerritsen, Mary E.
                                          Watanabe, Colin K. Williams, P. Mickey Wood, William I.
                                                                                                  Stewart, Timothy A.
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Roy, Margaret Ann
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Kljavin, Ivar J.
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Godowski, Paul J.
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               and Nucleic
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PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
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CURRENT FILING DATE: 2001-11-19
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OR FILING DATE: 1998-06-03
OR APPLICATION NUMBER: 60/088021
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088025
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088026
OR FILING DATE: 1998-06-04
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OR FILING DATE: 1998-06-02
OR POLICATION NUMBER: 60/087609
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087759
OR FILING DATE: 1998-06-02
OR FILING DATE: 1998-06-02
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PREFICATION NUMBER: 60/088167
DR FILING DATE: 1998-06-05
PREFICATION NUMBER: 60/088202
PREFICHE DATE: 1998-06-05
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FILING DATE: 1997-11-13
APPLICATION NUMBER: 60/066770
FILING DATE: 1997-11-24
APPLICATION NUMBER: 60/075945
                   APPLICATION NUMBER: 60/088826
FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088858
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FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088030
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APPLICATION NUMBER: 60/088033
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APPLICATION NUMBER: 60/087106
FILING DATE: 1998-05-28
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APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
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                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/088734 FILING DATE: 1998-06-10 APPLICATION NUMBER: 60/088738
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FILING DATE: 1998-06-09
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                                                                                          APPLICATION NUMBER: 60/088824 FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088326
FILING DATE:
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APPLICATION NUMBER: 60/088876 FILING DATE: 1998-06-11 APPLICATION NUMBER: 60/089105

60/089440

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APPLICANT: Stewart, Timothy A.

APPLICANT: Watanabe, Colin K.

APPLICANT: Watanabe, Colin K.

APPLICANT: Williams, p. Mickey
APPLICANT: Wood, William I.

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C6
CURRENT APPLICATION NUMBER: US/09/989,723
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
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US-09-989-723-295
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FILING DATE: 1998-07-02
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Similarity 57.1%;
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: Baker, Kevin P.
: Botstein, David
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Stewart, Timothy A.
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R FILING DATE: 1998-06-19
R APPLICATION NUMBER: 60/0:
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APPLICATION NUMBER: 60/089947 FILING DATE: 1998-06-19 APPLICATION NUMBER: 60/089948

APPLICATION NUMBER: 6 FILING DATE: 1998-06-APPLICATION NUMBER: 60/ FILING DATE: 1998-06-18

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FILING DATE:

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60/089907

APPLICATION NUMBER: 60/

FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089653
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APPLICATION NUMBER: 60/089599
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FILING DATE: 1998-06-17
APPLICATION ..... APPLICATION NUMBER: 60/089532 FILING DATE: 1998-06-17

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998-06-16

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OR FILING DATE: 1998-06-24
OR APPLICATION NUMBER: 60/090540
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OR APPLICATION NUMBER: 60/090557
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OR FILING DATE: 1998-06-25
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APPLICATION NUMBER: 60/090690 FILING DATE: 1998-06-25 APPLICATION NUMBER: 60/090694 FILING DATE: 1998-06-25

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DR APPLICATION NUMBER: 60/090435

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60/090431 60/090429

FILING DATE: 1998-00 APPLICATION NUMBER:

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APPLICATION NUMBER: 60/090355

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DR APPLICATION NUMBER: 60/078910
DR FILING DATE: 1998-03-20
DR PPLICATION NUMBER: 60/083322
DR FILING DATE: 1998-04-28
DR APPLICATION NUMBER: 60/084600
DR FILING DATE: 1998-05-07

OR APPLICATION NUMBER: 60/065186
OR FILING DATE: 1997-11-12
OR APPLICATION NUMBER: 60/065311
OR FILING DATE: 1997-11-13
OR APPLICATION NUMBER: 60/066770
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PRIOR APPLICATION NUMBER: 60/087106
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/087607
PRIOR APPLICATION NUMBER: 60/087607
PRIOR APPLICATION NUMBER: 60/087609
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/087827
PRIOR APPLICATION NUMBER: 60/08025
PRIOR PILING DATE: 1998-06-04
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PRIOR PILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/08026
PRIOR APPLICATION NUMBER: 60/08026
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APPLICANT: Zhang, Zemin
TITILE OF INVENTION: Secreted and Transmembrane Pol
TITILE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C56
CURRENT APPLICATION NUMBER: US/09/989,279
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065316
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/066770
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APPLICATION NUMBER: 60/
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Gerritsen, Mary E.
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art, Timothy A.
NUMBER: 60/075945
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FILE REFERENCE: P2730P1C65
CURRENT APPLICATION NUMBER: US/09/989,727
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/06250
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                                                                                                          APPLICATION NUMBER: 60/075945
FILING DATE: 1998-02-25
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Williams,
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Roy, Margaret Ann
Stewart, Timothy A.
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P. Mickey
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Pred. No. 1.5e
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730PLC70
CURRENT APPLICATION NUMBER: US/09/989,731
CURRENT APPLICATION NUMBER: 60/049787
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065186
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FILING DATE: 1998-02-25
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
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FILING DATE: 1998-07-07
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FILING DATE: 1998-06-02
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Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wood, William I.
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Kljavin, Ivar J.
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Godowski, Paul J
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Gerritsen, Mary E.
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                                                       1998-06-02
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OR FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/089801
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FILING DATE: 1998-06-16
APPLICATION NUMBER: 60/089532
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APPLICATION NUMBER: 60/089653
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APPLICATION NUMBER: 60/089440
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FILING DATE: 1998-06-11
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FILING DATE: 1998-07-07
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Query Match 76.9%; Score 30; DB 10; Length 237; Best Local Similarity 57.1%; Pred. No. 1.5e+02;
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C57
CURRENT APPLICATION NUMBER: US/09/989,732
CURRENT FILING DATE: 2001-11-19
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FILING DATE: 1997-11-24
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Baker, Kevin P.
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Gerritsen, Mary E
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Stewart, Timothy A.
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APPLICATION NUMBER: 60/088212
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OR APPLICATION NUMBER: 60/090676

OR APPLICATION NUMBER: 60/090678

OR APPLICATION NUMBER: 60/090678

OR FILING DATE: 1998-06-25

OR APPLICATION NUMBER: 60/090690

OR APPLICATION NUMBER: 60/090690

OR FILING DATE: 1998-06-25

OR APPLICATION NUMBER: 60/090694

OR FILING DATE: 1998-06-25

OR FILING DATE: 1998-06-25
                                                                                                                                         OR APPLICATION NUMBER: 60/091626
DR FILING DATE: 1998-07-02
DR FILING DATE: 1998-07-02
DR FILING DATE: 1998-07-07
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APPLICATION NUMBER: 60/090431
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APPLICATION NUMBER: 60/091544
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APPLICATION NUMBER: 60/091360
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APPLICATION NUMBER: 60/091478
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APPLICATION NUMBER: 60/090444
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APPLICATION NUMBER: 60/090429
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OR APPLICATION NUMBER: 60/075945
OR FILING DATE: 1998-02-25
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/08322
OR FILING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/084600
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/087106
OR FILING DATE: 1998-05-28
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OR APPLICATION NUMBER: 60/087759
OR APPLICATION NUMBER: 60/087827
OR FILING DATE: 1998-06-02
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DR FILING DATE: 1997-11-12
DR APPLICATION NUMBER: 60/065311
DR FILING DATE: 1997-11-13
DR APPLICATION NUMBER: 60/066770
DR FILING DATE: 1997-11-24
DR APPLICATION NUMBER: 60/088025
DR FILING DATE: 1998-06-04
DR APPLICATION NUMBER: 60/088026
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5. US20020127576A1)
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Baker, Kevin P.
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Gerritsen, Mary E.
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Godowski, Paul
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OR FILING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089532
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089538
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089599
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OR APPLICATION NUMBER: 60/089600
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OR FILING DATE: 1998-06-18
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DR FILING DATE: 1998-06-05
DR APPLICATION NUMBER: 60/088212
DR FILING DATE: 1998-06-05
DR APPLICATION NUMBER: 60/088217
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DR APPLICATION NUMBER: 60/088655
DR FILING DATE: 1998-06-09
DR APPLICATION NUMBER: 60/088734
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DR FILING DATE: 1998-06-10
DR APPLICATION NUMBER: 60/088858
DR FILING DATE: 1998-06-11
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APPLICATION NUMBER: 60/089440
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RESULT 13
US-09-990-442-295
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Best Local Similarity
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Sequence 295, Application US/09990442
Patent No. US20020132252A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
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OR FILING DATE: 1998-06-25
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 APPLICATION FILING DATE:
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembra
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C8
CURRENT APPLICATION NUMBER: US/09/990,442
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065311
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PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/1
PRIOR FILING DATE: 1998-06-02
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PRIOR FILING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
OR FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/084600
FILING DATE: 1998-05-07
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Roy, Margaret Ann
Stewart, Timothy A.
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Grimaldi,J.Christopher
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Gerritsen, Mary E
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RESULT 14
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                       APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Bestein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Appoleon
APPLICANT: Fong, Sherman
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Eaton, Dan L.
Ferrara, Napoleone
Fong, Sherman
Gerber, Hanspeter
Gerritsen, Mary E.
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Pred.
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1.5e+02;
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CURRENT APPLICATION NUMBER: US/09/991,
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-00-16
PRIOR PRIOR DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-12
PRIOR PRIOR FILING DATE: 1997-11-12
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066770
PRIOR APPLICATION NUMBER: 60/05945
PRIOR FILING DATE: 1998-02-25
PRIOR FILING DATE: 1998-02-25
PRIOR FILING DATE: 1998-02-25
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C17
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OR APPLICATION NUMBER: 60/087827
OR FILING DATE: 1998-06-03
OR APPLICATION NUMBER: 60/088021
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088025
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088026
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088026
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088028
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088029
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088030
OR PILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088030
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R FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/087106
OR FILING DATE: 1998-05-28
OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-06-02
OR FILING DATE: 1998-06-02
OR FILING DATE: 1998-06-02
                                                                      R APPLICATION NUMBER: 60/08
R FILING DATE: 1998-06-04
R APPLICATION NUMBER: 60/08
R FILING DATE: 1998-06-05
R APPLICATION NUMBER: 60/08
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APPLICATION NUMBER: 60/
FILING DATE: 1998-06-04
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FILING DATE: 1998-03-20
     FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088217
FILING DATE: 1998-06-05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumas,
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Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Margaret Ann art, Timothy A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Daniel
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OR APPLICATION NUMBER: 60/089514

OR FILING DATE: 1998-06-16

OR APPLICATION NUMBER: 60/089532

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089538

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089598

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089599

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OR APPLICATION NUMBER: 60/089599

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089600

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089600

OR FILING DATE: 1998-06-17

OR APPLICATION NUMBER: 60/089653
R APPLICATION NUMBER: 60/090435
R FILING DATE: 1998-06-24
R APPLICATION NUMBER: 60/090444
DR FILING DATE: 1998-06-24
DR APPLICATION NUMBER: 60/090445
DR FILING DATE: 1998-06-24
DR FILING DATE: 1998-06-24
DR APPLICATION NUMBER: 60/090472
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R APPLICATION NUMBER: 60/889947

OR FILING DATE: 1998-06-19

OR APPLICATION NUMBER: 60/089948

OR FILING DATE: 1998-06-19

OR APPLICATION NUMBER: 60/089952

OR FILING DATE: 1998-06-19
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R APPLICATION NUMBER: 60/089801

R FILING DATE: 1998-06-18

R APPLICATION NUMBER: 60/089907

DR FILING DATE: 1998-06-18

R APPLICATION NUMBER: 60/089908
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R APPLICATION NUMBER: 60/09
R FILING DATE: 1998-06-23
R FILING DATE: 1998-06-24
R APPLICATION NUMBER: 60/09
R FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090349
APPLICATION 1998-06-23
APPLICATION NUMBER: 60/090349
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APPLICATION NUMBER: 60/090252
FILING DATE: 1998-06-22
APPLICATION NUMBER: 60/090254
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APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
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FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/089105
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APPLICATION NUMBER:
FILING DATE: 1998-06
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APPLICATION NUMBER: 60/088826
FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088858
FILING DATE: 1998-06-11
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FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088810
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FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088738
FILING DATE: 1998-06-10
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APPLICATION NUMBER:
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RESULT 15
US-09-993-604-295
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                       APPLICANT:
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Best 1
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        APPLICANT:
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OR APPLICATION NUMBER: 60/090695
OR APPLICATION NUMBER: 60/090696
OR APPLICATION NUMBER: 60/090862
OR APPLICATION NUMBER: 60/090862
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/090863
OR APPLICATION NUMBER: 60/090863
OR APPLICATION NUMBER: 60/091360
OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091478
OR APPLICATION NUMBER: 60/091478
OR APPLICATION NUMBER: 60/091478
OR APPLICATION NUMBER: 60/091544
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OR APPLICATION NUMBER: 60/091544
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OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091519
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OR APPLICATION NUMBER: 60/091978

OR FILING DATE: 1998-07-07

OR APPLICATION NUMBER: 60/091982

OR FILING DATE: 1998-07-07

OR APPLICATION NUMBER: 60/092182

OR FILING DATE: 1998-07-09

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R FILING DATE: 1998-06
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FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090678
FILING DATE: 1998-06-25
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APPLICATION NUMBER: 6
FILING DATE: 1998-06-
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US20020137075A1
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Similarity 57.1%;
4; Conservative
                                                                                  Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, J.Christopher
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                                             Gurney, Austin L.
Kljavin, Ivar J.
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Botstein, David
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                       Napier, Mary
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1998-07-02
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Pred. No. 1.5e
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CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR PILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/065186
PRIOR FILING DATE: 1997-11-12
PRIOR FILING DATE: 1997-11-12
PRIOR PILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066770
PRIOR PILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/075945
PRIOR FILING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/078910
PRIOR PILING DATE: 1998-03-20
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TITLE OF INVENTION: Secreted and
TITLE OF INVENTION: Acids Encodi
FILE REFERENCE: p2730p1C25
OR FILING DATE: 1998-06-05
OR APPLICATION NUMBER: 60/088217
OR FILING DATE: 1998-06-05
OR FILING DATE: 1998-06-09
OR APPLICATION NUMBER: 60/088655
OR FILING DATE: 1998-06-10
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OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088742
OR FILING DATE: 1998-06-10
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PR APPLICATION NUMBER: 60/08029

PR FILING DATE: 1998-06-04

PR APPLICATION NUMBER: 60/08030

PR FILING DATE: 1998-06-04

PR FILING DATE: 1998-06-04

PR APPLICATION NUMBER: 60/08033

PR FILING DATE: 1998-06-04

PR APPLICATION NUMBER: 60/088326

PR APPLICATION NUMBER: 60/088326

PR APPLICATION NUMBER: 60/088167

PR APPLICATION NUMBER: 60/088167

PR FILING DATE: 1998-06-05

PR APPLICATION NUMBER: 60/088202

PR APPLICATION NUMBER: 60/088202

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DR FILING DATE: 1998-06-04
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DR FILING DATE: 1998-06-04
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DR FILING DATE: 1998-06-04
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R FILING DATE: 1998-06-
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Tumas, D
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Williams, P. Mickey
Wood, William I.
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wart, Timothy /
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OR FILING DATE: 1998-06-17
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OR FILING DATE: 1998-06-18
OR PELICATION NUMBER: 60/08981
OR APPLICATION NUMBER: 60/089907
OR FILING DATE: 1998-06-18
OR APPLICATION NUMBER: 60/089907
OR FILING DATE: 1998-06-19
OR APPLICATION NUMBER: 60/089947
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OR PILING DATE: 1998-06-19
OR APPLICATION NUMBER: 60/089947
OR APPLICATION NUMBER: 60/089947
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OR FILING DATE: 1998-06-22
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OR FILING DATE: 1998-06-24
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DR APPLICATION NUMBER: 60/089440
DR FILING DATE: 1998-06-16
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APPLICATION NUMBER:
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PRIOR FILING DATE: 1998-07-02
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PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091978
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/091982
Query Match
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OR APPLICATION NUMBER: 60/090863
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ICR FILING DATE: 1998-07-02
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OR APPLICATION NUMBER: 60/090690
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FILING DATE: 1998-06-25
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57.1%;
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    Mismatches
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No. 1.5e+02;
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Qy 4 NXXCPXC 10 | | | | | Db 122 NAECPAC 128

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Gaps

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Search completed: December 13, 2002, 08:46:14 Job time : 2.17791 secs

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Post-processing: Minimum Match 0%
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   GenCore version (c) 1993 - 2002
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US-08-458-499-3
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US-08-560-398-12
US-08-560-398-2
US-09-55-699-34
US-09-661-468-34
US-09-665-538-37
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208.519 Million cell updates/sec
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US-08-084-848A-3
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                     Query Match
Best Local S
            Matches
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Abogadie, Fe
APPLICANT: Hopkins, Chris E.
APPLICANT: Dykert, John
APPLICANT: TOTRES, JOSEP L.
TITLE OF INVENTION: Conotoxins I
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                     REFERENCE/DOCKET NUMBER: 52:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)552-1311
TELEFAX: (619)52-0095
TELEX: 20 6566 PATLAW CGO
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/084,848A
FILING DATE: June 29, 1993
CLASSIFICATION: 536
CLASSIFICATION: 536
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MEDIUM TYPE: Floppy disk
                                                               TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: pept
                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Schumann,, James J
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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CITY: Chicago
STATE: Illinios
COUNTRY: USA
            Local Similarity
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135 South LaSalle Street, Suite
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            Conservative
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US-08-331-394-11
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US-08-691-814B-13
US-08-691-814B-13
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                     DB 1;
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Result

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Minimum DB Maximum DB

Database

Scoring table: Sequence: Title: Perfect score: Run on: OM protein -

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RESULT 3
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US-08-458-499-3
GENERAL INFORMATION:
APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/227,357
CURRENT FILING DATE: 1999-01-08
                                                                                          Sequence 154, Application US/09227357 Patent No. 6342581
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                                                                                                                                                                                                                                                                  Best
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TELEX: 20 6566 PATLAW CGO
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08,
FILING DATE: 02-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/08,
FILING DATE: June 29, 199,
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Schumann, James J.
REGISTRATION NUMBER: 20856
REFERENCE/DOCKET NUMBER: 52:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)552-1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hopkins, .....APPLICANT: Dykert, John APPLICANT: Torres, Josep L. APPLICANT: TORRES, JOSEP L. CONOTOXINS I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/458,499
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ADDRESSEE: Fitch, Ev
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mes 5; Conserv
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EARLIER APPLICATION NUMBER: 60/
EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 154
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TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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RAPPLICATION NUMBER: 60/052,795

RE FILING DATE: 1997-07-08

PR APPLICATION NUMBER: 60/051,919

RE FILING DATE: 1997-07-08

PR FILING DATE: 1997-07-08

RE FILING DATE: 1997-07-08
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R APPLICATION NUMBER: 60,
R FILING DATE: 1997-09-12
R APPLICATION NUMBER: 60,
R APPLICATION NUMBER: 60,
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FILING DATE: 1997-08-18
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FILING DATE: 1997-08-18
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APPLICATION NUMBER: 60/055,953
FILING DATE: 1997-08-18
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FILING DATE: 1997-08-18
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; NAME/KEY: SITE
; LOCATION: (151)
; OTHER INFORMATION:
US-09-227-357-154
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                                                                                                                                                         RESULT 5
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REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 0230
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 12:
                                Sequence 2, Application US/08560398 Patent No. 5907082 GENERAL INFORMATION:
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Matches
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Patent No. 59
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Best Local Similarity
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TOPOLOGY: lin-
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
APPLICANT: O'Neill, Sharman
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                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ovule-Specific Gene Expression
                                                                                                                                                                                                                                                                                                                                                                                                76.98;
57.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       equals
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Pred. No. 4.9e
0; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       any of
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                                                                                                                                                                                                                                                                                                                                                                       4.9e+02;
.ches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4;
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APPLICATE:
FILING DATE:
FILING DATE:
CLASSIFICATION: 536
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 293-7860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, VG
CURRENT APPLICATION NUMBER: US/08/560,398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-NOV-1995
FILING DATE: 17-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bastlan, Kevin L.
REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-TOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS: ADDRESSEE: Sughrue, Mion,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Tsutomu, FUJIWARA
APPLICANT: Takeshi, WATANABE
APPLICANT: Masato, HORIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Nadeau, Jeanette TITLE OF INVENTION: Ovule-S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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CITY: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 57.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE:
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TYPE: amino acid
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o. 5831058
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2100 Pennsylvania Avenue, N.W
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(415) 576-0300
777 TD NO: 2:
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Toyoma
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57.1%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zinn, Macpeak & Seas
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                                                                                                                                                                                                                                                                                                                             Version #1.30
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GENERAL

APPLICANT: Takeshi, n...

APPLICANT: Masato, HORIE

APPLICANT: Masato, HORIE

APPLICANT: TOYOMASA, KATAGIRI

TITLE OF INVENTION: HUMAN GENE

NUMBER OF SEQUENCES: 42

CORRESPONDENCE ADDRESS:

ADDRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas

""BEET: 2100 Pennsylvania Avenue, N.W."
                                                                                                                                                                                                                         ; LENGTH: 810 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-055-699-34
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                                 US-09-273-565-34
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US-09-055-699-34
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                                                  RESULT 8
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                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPRONE: (202) 293-7860
TELEPRAX: (202) 293-7860
TELEX: 6491103
INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
LENGTH: 810 amino acids
TYPE: amino acid
Sequence 34, Applic
Patent No. 6166190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 34, Application US/09055699 Patent No. 6005088
                                                                                                                                                               Matches
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                                                                                                                                                                                             Query Match
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INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 810 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/820,170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 20037-3202
COMPUTER READABLE FORM:
MEDIUM TXPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                 224 NHTCPTC 230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                               Local Similarity
nes 4; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/055,699
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                                                                                                                               4 NXXCPXC 10
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                Application US/09273565A
                                                                                                                                                               Conservative
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                                                                                                                                                                              76.9%;
57.1%;
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                                                                                                                                                                            Score 30; DB 3;
Pred. No. 5.4e+02;
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Pred. No. 5.4e+02;
                                                                                                                                                               Mismatches
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                                                                                                                                                                                             Length 810;
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-273-565-34
                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 0-53599
CURRENT APPLICATION NUMBER: US/09/565,538
CURRENT FILLING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 09/273,565
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1998-04-07
PRIOR FILING DATE: 1998-04-07
PRIOR APPLICATION NUMBER: 08/820,170
PRIOR APPLICATION NUMBER: 09/63410/1996
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR FILING DATE: 1996-03-19
PRIOR FILING DATE: 1996-03-19
PRIOR FILING DATE: 1996-03-19
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CURRENT FILING DATE: 1999-03-22
EARLIER APPLICATION NUMBER: 09/055,699
EARLIER FILING DATE: 1998-04-07
EARLIER APPLICATION NUMBER: 08/820,170
EARLIER APPLICATION NUMBER: 08/820,170
EARLIER FILING DATE: 1997-03-19
EARLIER APPLICATION NUMBER: UP 63410/1996
EARLIER FILING DATE: 1996-03-19
EARLIER APPLICATION NUMBER: UP 636163/1997
                                                                                       Query Match
Best Local S
Matches 4
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 34
LENGTH: 810
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Matches 4; Conserv
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Patent No. 6333404
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APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
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APPLICANT: WATANABE, TAKESHI
APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1997-03-05
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                                                                                                                                                                                                                              TYPE: PRT
224 NHTCPTC 230
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nes 4; Conserv
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57.1%;
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57.1%;
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Pred. No. 5.4e+02;
0; Mismatches 3;
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Pred. No. 5.4e+02;
0; Mismatches 3
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; TYPE: PRT; ORGANISM: Homo sapiens US-09-661-468-34
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US-09-661-468-34
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PRIOR ETLING DATE: 1997-03-19
PRIOR APPLICATION NUMBER: UP 63
PRIOR ETLING DATE: 1996-03-19
PRIOR APPLICATION NUMBER: UP 69
PRIOR ETLING DATE: 1997-03-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No. 5831058
GENERAL INFORMATION:
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Patent No. 6376189
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TITLE OF INVENTION:
FILE REFERENCE: Q-5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: FUJIWARA, TSUI
APPLICANT: WATANABE, TAKI
APPLICANT: HORIE, MASATO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/661,468
CURRENT FILING DATE: 2000-09-13
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1998-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
             TELEFAX: (202) 293-7860
TELEX: 6491103
INFORMATION FOR SEQ ID NO: 37:
                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                          TSUTOMU, FUJIWARA
APPLICANY: Takeshi, WATANABE
APPLICANT: Masato, HORIE
APPLICANT. Masato
                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas
STREET: 2100 Pennsylvania Avenue, N.W.
                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                   TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224 NHTCPTC 230
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nes 4; Conserv
                                                 TELEPHONE: (202) 293-700 TELEFAX: (202) 293-7860
                                                                                                         FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                        ZIP: 20037-3202
                                                                                                                                                                                                                                                                                                          CITY: Washington STATE: D.C.
                                                                                                                                           APPLICATION NUMBER: US/08/820,170A
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SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
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57.1%;
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Pred. No.
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APPLICANT: Masacc,
APPLICANT: Masacc,
APPLICANT: TOYOMASA, KATAGA...
TITLE OF INVENTION: HUMAN GENE
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
CORRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas
TREET: 2100 Pennsylvania Avenue, N.W.
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                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-09-055-699-37
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US-09-055-699-37
                                                                                           RESULT 13
US-09-273-565-37
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GENERAL INFORMATION:
APPLICANT: FUJIWARA, TSUTOMU
APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
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                                           Sequence 37, Applica Patent No. 6166190 GENERAL INFORMATION:
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Best Local :
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                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ. ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 816 amino acid
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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TELEX: 6491103
RMATION FOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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nes 4; Conservative
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                                                                         Application US/09273565A
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Masato, HORIE
                                                                                                                                                                                                                  Conservative
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57.1%;
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Pred. No. 5.4e
0; Mismatches
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Pred. No. 5.4e+02;
0; Mismatches 3;
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ches 3;
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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 37
LENGTH: 816
TYPE: PRT
ORGANISM: Homo sapiens
US-09-273-565-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
CURRENT APPLICATION NUMBER: US/09/565,538
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 09/273,565
PRIOR FILING DATE: 1999-03-22
PRIOR FILING DATE: 1999-03-29
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR APPLICATION NUMBER: 09/059
PRIOR FILING DATE: 1997-03-19
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR APPLICATION NUMBER: JP 69163/1997
PRIOR FILING DATE: 1997-03-05
NUMBER: DF 69163/1997
PRIOR FILING DATE: 1997-03-05
NUMBER: DF 69163/1997
PRIOR FILING DATE: 1997-03-05
RESULT 15
US-09-661-468-37
; Sequence 37, Application US/09661468
                                                                                                                                                                                                                                                                                                                     ; LENGTH: 816
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-565-538-37
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CURRENT APPLICATION NUMBER: US/09/273,565A

CURRENT FILING DATE: 1999-03-22

EARLIER APPLICATION NUMBER: 09/055,699

EARLIER FILING DATE: 1998-04-07

EARLIER APPLICATION NUMBER: 08/820,170

EARLIER FILING DATE: 1997-03-19

EARLIER FILING DATE: 1997-03-19

EARLIER APPLICATION NUMBER: JP 63410/1996

EARLIER APPLICATION NUMBER: JP 63410/1996
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Best Local Similarity 5/...
Ches 4; Conservative
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Matches 4; Conserv
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APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
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EARLIER FILING DATE: 1997-03-05
NUMBER OF SEQ ID NOS: 95
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57.1%;
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Pred. No. 5.4e+02;
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Pred. No. 5.4e+02;
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Search completed: December 13, 2002, 08:45:19 Job time : 3.69325 secs
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SEQ ID NO 37
LENGTH: 816
                                                                                                                                                                          Matches
                                                                                                                                                                                                 Query Match
Best Local
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PRIOR APPLICATION NUMBER: JP (
PRIOR FILING DATE: 1997-03-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/661,468
CURRENT FILING DATE: 2000-09-13
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1998-04-07
PRIOR APPLICATION NUMBER: 08/820,170
PRIOR FILING DATE: 1997-03-19
PRIOR FILING DATE: 1997-03-19
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR APPLICATION NUMBER: JP 63410/1996
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APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
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                                                                                      225 NRTCPTC 231
                                                                                                                                                                          Local Similarity 57.
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1996-03-19
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57.1%;
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Pred. No. 5.4e+02;
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
                                                        /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2001.DAT:
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344.760 Million cell updates/sec
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score q No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, s derived by analysis of the total score distribution. than or equal by analysis c

## SUMMARIES

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AAU15883	ABB72391	AAU16338	AAG36278	AAU16336	AAB87620	AAY36293	AAM80051	AAG03183	ABP01599	ID
Human novel secret	Murine protein iso	Human novel secret	Arabidopsis thalia	Human novel secret	Bovine mammary tis	Human secreted pro	Human protein SEQ	Human secreted pro	Human ORFX protein	Description

Shimkets RA,

Leach MD;

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
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AAG31082	AAB92857	ABB61452	AAG35458	AAG35459	AAB92587	AAG35460	AAU93092	AAG09609	AAG31330	AAG13256	AAG31331	AAG28881	AAG09610	AAG09611	AAG31332	AAG13257	AAG28882	AAY52379	AAG36276	AAG28883	AAG13258	AAU15881	AAG73661	AAM41712	AAG36277	ABB79353	AAM39926	AAM79067	AAB65244	AAU29134	AAY66721	AAY87321	265	AAM25880
Arabidopsis thalia	Human protein sequ	Drosophila melanog	Arabidopsis thalia	Arabidopsis thalia	Human protein sequ	Arabidopsis thalia	Arabidopsis transc	Arabidopsis thalia	S	ŝ	S	S	S	Arabidopsis thalia	Arabidopsis thalia			Pseudomonas aerugi				Human novel secret	Human colon cancer	The second	thali		polyp	protein		Human PRO polypept	Membrane-bound pro	Human signal pepti	secreted	Human protein sequ

## ALIGNMENTS

ABP01599 RESULT 1 ABP01599; ABP01599 standard; Protein; 80 AA. Human ORFX protein sequence SEQ ID NO:3180 24-JUN-2002 (first entry)

PART REPORT OF THE PROPERTY OF Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis; myasthenia gravis. 30-MAY-2000; 2000US-206132P. 29-AUG-2000; 2000US-228716P. 06-DEC-2001. WO200192523-A2 (CURA-) CURAGEN CORP 29-MAY-2001; 2001WO-US10836 Homo sapiens.

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RESULT 2
AAG03183
ID AAGC
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XX AAGC
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CX Huma
XX Huma
XX Gent
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   Dumas Milne Edwards J,
                                                                                                                                                                                                                                 21-FEB-2000; 2000EP-0200610
                                                                                                                                                                                                                                                                                                             06-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                        EP1033401-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human secreted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful for treating burns, incisions, ulcers, for treating osteopor bone degenerative disorders, or periodontal disease, and for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues and conditions resulting from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating syndrome associated with ORFX-associated disorder. ORFX polynucleotide
                                                                                                                                                          26-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAG03183 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes substantially purified human (referred to as open reading frame, ORFX, where X is 1-11491 in the specification). ABN15762 to ABN27252 encode the human proteins given in ABP00010 to ABP11500. ORFX proteins are use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders
                                                                               (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-OCT-2000
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DB; ABN17351.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID 3180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chromosome
                                                                                                                                                          99US-0122487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein, SEQ ID NO: 7264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79.5%;
   Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence tag; secreted protein; cDNA isolation; mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1037pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 31; DB Pred. No. 2.2e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
   Giordano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 23;
2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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RESULT 3
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                03-FEB-2000;
27-APR-2000;
20-JUN-2000;
19-JUL-2000;
01-SEP-2000;
15-SEP-2000;
20-OCT-2000;
          Tang YT,
Zhao QA,
Xue AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of 5' ESTS derived from mRNAs encoding secreted proteins. The 5' ESTS were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic chromosome mapping procedures. They are used to obtain upstream chromosome mapping procedures. They are used to obtain upstream
                                                                                                                                                                                                                                                                                                        Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopolesis; tissue growth factor; immunomodulatory; cancer; leukaemia; nervous system disorder; arthritis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                      05-FEB-2001;
                                                                                                                                                                                                                                                         WO200157190-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM80051 standard;
                                                                                                                                                                                                                                09-AUG-2001
                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                     Human protein SEQ ID NO 3697.
                                                                                                                                                                                                                                                                                                                                                                                                 06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                         AAM80051;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 13; SEQ ID 7264; 71pp + CD-ROM; English
                                                            (HYSE-)
                                                                                      30-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         regulatory sequences and to design expression and secretion vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NSQCPAC
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                                                              HYSEQ
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          Liu C,
Wang D,
Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84
                                                                                   2000US-0496914
2000US-0560875
2000US-058075
2000US-0620325
2000US-0654936
2000US-0663561
2000US-0693325
2000US-0728422
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                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                        2001WO-US04098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26
                                                            INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA;
          Drmanac RT, Asundi V,
Wang J, Zhang J, Ren
Wejhrman T, Goodrich R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein; 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a polypeptide encoded by one of a large |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 30; DB Pred. No. 3.2e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 21,
3.2e+02;
3;
                      Zhou
F, C
                       chen
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                         Ŗč
              и С,
Wang
                  Cao .
ZW;
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RESULT 4 | AAY36293 ID AAY36293 ID AAY3629 AC AAY3629 AC AAY3629 XX Human s XX Homo s Homo s YX Homo s YX X Homo s Ho
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                            18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
19-DEC-1997;
19-DEC-1997;
19-DEC-1997;
19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to polynucleotides (AAK51456-AAK53435) and the encoded polypeptides (AAM/8323-AAM80302) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polynucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, haematopoiesis regulating activity, this provided activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-476283/51
N-PSDB; AAK53184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            foetal deficiency; blood disorder; immune system disorder; inflammation; autoimmune disease; allergy; Alzheimer's disease; cognitive disorder; schizophrenia; arthritis; asthma; psoriasis; sepsis; skin disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; secreted protein; cancer; to foetal deficiency; blood disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             schizophrenia; arthritis; asthma; psoriasis; sepsis; skin disorder; atherosclerosis; diabetes; cardiovascular disorder; kidney disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human secreted protein encoded by gene 70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY36293 standard; Protein; 130 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 20; Page 414; 6221pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       17-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09931117-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                   19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   were missing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AAM80020) are omitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 NXXCPXC 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NNTCPTC 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Records for SEQ ID NO 2110 (AAK52581),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acids encoding polypeptides with cytokine-like activities in diagnosis and gene therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                118 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                re omitted as the relevant pages at the time of publication.
                                                      97US-0070923.
97US-0068169.
97US-0068365.
97US-0068367.
                                                                                                                                                                                                                        97US-0068053.
97US-0068054.
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970S-0068007
                                                                                                                                                                                                                                                                                                                                                              97US-0068369
                                                                                                                                                                  97US-0068064
                                                                                                                                                                                                 97us-0068057
                                                                                                                                                                                                                                                                                 97US-0068008
                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US27059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer; tumour; developmental abnormality;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2111 (AAK52582) and 3666 from the sequence listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 118;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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RESULT 5
AABB76
AABB76
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XX BOVI
DT 15-M
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Best Local :
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Ni J, Rosen
Yu G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polypeptides are useful for preventing, treating or ameliorating medical conditions, e.g. by protein or gene therapy. Also pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new genes. Specific uses are described for each of the 110 genes, based on which tissues they are most highly expressed in, and include developing products for the diagnosis or treatment of cancer, tumours, developmental abnormalities and foetal deficiencies, blood disorders, diseases of the immune system, autoimmune diseases, inflammation, allergies, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders, kidney disorders, digestive/endocrine disorders, infections and AIDS. The polypeptides are also useful for identifying their binding partners. The sequences given in AAX97907 to AAX97915 and AAX36223 are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and cognitive disorders, schizophrenia, arthritis, asthma, psoriasis, sepsis, skin disorders, atherosclerosis, diabetes, cardiovascular
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 11; Page 383; 537pp; English.
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                                                                                   Havukkala IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovine; mammary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bovine mammary tissue derived protein #11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated human genes encoding secreted polypeptides
                            WPI; 2001-226619/23
                                                                                                                                                                                                                        23-AUG-1999;
                                                                                                                                                                                                                                                                               23-AUG-2000; 2000WO-NZ00166
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                                                                                                                                       (GENE-) GENESIS RES
(NZPA-) NEW ZEALAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32
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DB; AAX97985.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 AA;
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CA, Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                Gleen
                                                                                                                                                                                                                        99US-0150330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gland; cancer;
                                                                                                                                       & DEV CORP LTD.
PASTORAL AGRIC
                                                                                   Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76.98;
57.18;
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M, Janat F, Kyaw H,
Den SM, Shi Y, Soppe
                                                                                   Grigor MR,
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Pred. No. 4.4e+02;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour; angiogenesis
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, Soppet DR, W
                                                                                                                                       RES INST LTD
                                                                                   Molenaar AJ;
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Best Loc
Matches
31-JAN-2000

04-FEB-2000

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02-MAR-2000

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07-JUL-2000

07-JUL-2000

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nervous
corneal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary; secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiac arrest; cerebrovascular disorder; cerebral ischaemia; angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to proteins derived from bovine mammary gland cells. The invention is useful for stimulating bovine mammary gland cell growth and function, inhibiting the growth of various mammary gland cancer cells, inhibiting angiogenesis and vascularization of tumours, or modulating the growth of blood vessels in a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAU16336;
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                                                                                                                                                                                                                                                                                                                                                                                                                   17-JAN-2001;
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infection; wound
eing; food additiv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4;
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2000US-0184664
2000US-0189350
2000US-0199874
2000US-0199076
2000US-0199123
2000US-0209467
2000US-0214886
2000US-0214687
2000US-0214687
2000US-0214687
2000US-0215647
2000US-0215649
2000US-0215880
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2000US-0180628
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and polynucleotides encoding the polypeptides, which bovine mammary gland tissue, useful for stimulating owth or function, or inducing differentiation of milk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      e disorder; cardiovascular disorder; cardiac ar isorder; cerebral ischaemia; angiogenesis; sorder; Alzheimer's disease; infection; ocular; wound healing; epithelial cell proliferation; additive; preservative; antiproliferative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97pp;
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57.1%;
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4.5e+02;
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14-SEP-2000
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21-SEP-2000
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12 - AUG - 2000
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20 - SEP - 2000
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2000US-0229509
2000US-0229509
2000US-0230438
2000US-0231244
2000US-0231414
2000US-0231968
2000US-0231968
2000US-023398
2000US-023398
2000US-023399
2000US-0233400
2000US-0233401
2000US-0233401
2000US-0233064
2000US-0233064
2000US-02334299
2000US-0234299
2000US-0235834
2000US-0235834
2000US-0235834
2000US-0235836
2000US-0236370
200US-0236370
2000US-0236370
2000US-02
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2000US-0225758.
2000US-0225759.
2000US-0225759.
2000US-0226681.
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2000US-0226681.
2000US-0227009.
2000US-022709.
2000US-0229343.
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2000US-0225214.
2000US-0225266.
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The invention relates to isolated nucleic acid molecules and their CC encoded secreted proteins. The nucleic acids and proteins are used to CC prevent, treat or ameliorate a medical condition in e.g. humans, mice, CC rabbits, goats, horses, cats, dogs, chickens or sheep. They CC are also used in diagnosing a pathological condition or susceptibility CC to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in CC diagnostic immunoassays e.g. radioimmunoassays or enzyme linked include autoimmune diseases e.g. rheumatoid arthritis, continue autoimmune diseases e.g. rheumatoid arthritis, cc cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, or and in disorders e.g. cardiac arrest, cerebrovascular disorders e.g. corneal infection, and many other disorders e.g. corneal infection, and many other corneal cardiac arrest en also
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17-NOV-2000
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17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
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01-DEC-2000;
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05-DEC-2000;
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06-DEC-2000;
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08-DEC-2000;
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17-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                                                               New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions and used as food additives or preservatives -
                                                                                                                                                                                                                                                                                               Claim 11; SEQ ID No 1289; 980pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME
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DB; AAS26323.
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2000US-0251989.
2000US-0251990.
2000US-0254097.
2001US-0259678.
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2000US-0250160.
2000US-0250391.
2000US-0251030.
2000US-0251988.
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2000US-0246610.
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2000US-0246613.
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2000US-0251868
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2000US-0251479.
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2000US-0249209
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2000US-0246532
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Best Local S
Matches 4
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11-MAY-1999
19-MAY-1999
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04 WAY-1999
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16-APR-1999;
19-APR-1999;
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05-MAR-1999;
09-MAR-1999;
23-MAR-1999;
25-MAR-1999;
29-MAR-1999;
01-APR-1999;
06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention.
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57.1%;
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Pred. No. 4.8e+02;
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99US-0149723 99US-0149922 99US-0149930 99US-0150884 99US-0151086 99US-0151086 99US-01511303 99US-01513758 99US-01513758 99US-0154703 99US-0154703 99US-01556458 99US-0155659 99US-01564588 99US-01557865 99US-01557865 99US-01557865 99US-01557865 99US-01557865 99US-01557865 99US-01557865 99US-0159234 99US-0159234 99US-0159234 99US-0159234 99US-0159234 99US-0159234 99US-0159638 99US-0160767 99US-0160815 99US-0160816 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161406 99US-0161350 99US-0161350 99US-0161350	90S-014720 90S-014730 90S-014730 90S-014730 90S-014730 90S-014749 90S-014817 90S-014817 90S-014814 90S-014894 90S-014894 90S-014894 90S-014994 90S-014994

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RESULT 8
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Matches 4
    31-YAN-2000
04-FEB 2000
24-FEB 2000
02-MAR-2000
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07-UN-2000
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4; Conserv
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  2000US-0225447
2000US-0225213
2000US-0225213
2000US-0225214
2000US-0225266
2000US-0225267
2000US-0225267
2000US-0225277
2000US-0225277
2000US-0225447
2000US-0225477
2000US-0225759
2000US-0225758
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2000US-02268681
2000US-02268681
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2000US-0215135
2000US-0216647
2000US-0216880
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2000US-0217496
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2000US-0218290
2000US-0220963
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2000US-0189874.
2000US-0190076.
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2000US-0205515.
2000US-0209467.
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Pred. No. 5.
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    14-SEP-2000
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20-CCT-2000
02-CCT-2000
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08-NOV-2000
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30-AUG-2000;
01-SEP-2000;
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2000US-0231414
2000US-0232081
2000US-0232081
2000US-0232399
2000US-0232399
2000US-0233063
2000US-0233497
2000US-0234998
2000US-02344974
2000US-0235836
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2000US-0230437.
2000US-0230438.
2000US-0231242.
2000US-0231242.
2000US-0231243.
2000US-0231244.
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Query Match
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17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
                                                                                                             e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzhelmer's disease, infections caused by bacteria, viruses and fung and ocular disorders e.g. corneal infection, and many other disorders listed in the specification. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used and ditive or preservative to increase or decrease storage
                                                                                                                                                                                                                                                    encoded secreted proteins. The nucleic acids and proteins are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked inmunosorbant assays (ELISA). Disorders which are diagnosed or treated include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders.
                                                                   capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11;
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         Similarity 57.1
4; Conservative
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2000US-0256719.
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                        76.9%;
57.1%;
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        Score 30; DB Pred. No. 5.9e 0; Mismatches
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DB 2...
5.9e+02;
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4 NXXCPXC

Human novel secreted protein,

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RESULT 10
AAU15883
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ABB72391
DEXXX
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Matches 4
                                                                                                                                                                                                                                                                                    The present invention provides the protein and coding sequences of cDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound
                                                                                                                                                                                                                                                                                                                                                                                                                            New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
                        07-NOV-2001
                                                AAU15883;
                                                                         AAU15883 standard;
                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 456-457; 466pp; English
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N-PSDB; ABL35081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; rat; mouse; skin cell; skin wound; cancer; growth defect; developmental defect; inflammatory disease; dermatological; vulrimmunomodulator; anti-inflammatory; cytostatic; neuroprotective.
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                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                              polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                modulating immune responses
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25-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine
                                                                                                                                                                                                                                                                           healing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENE-) GENESIS RES & DEV CORP LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  179
                                                                                                                                                               4 NXXCPXC
                                                                                                                                      5 NSRCPTC 11
                                                                                                                                                                                                                                                               e important roles in the induction of hair growth, cell proliferaticell interaction, in maintaining tissue integrity, in wound ling and in modulating immune responses. The present sequence is a ypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NSTCPIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein isolated
                                                                                                                                                                                     Similarity
4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                      200 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strachan
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                       (first entry)
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2000US-221232P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein;
                                                                         Protein;
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                                                                                                                                                                                                   76
57
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                                                                         201
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                                                                                                                                                                                        0;
                                                                                                                                                                                                  Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            skin
                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cells SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Onrust R,
                                                                                                                                                                                                   6e+02;
                                                                                                                                                                                                               23;
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                                                                                                                                                                                                            Length 200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Murison
                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vulnerary;
                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kumble
                                                                                                                                                                                        Gaps
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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Human; immunosuppressive; cytostatic; cardiant; vas neuroprotective; antibact vulnerary; secreted prote hyperproliferative disorder; hyperproliferative disorder; corneal infection; wound skin ageing; food additiv Homo sapiens.  WC200155322-A2.  02-AUG-2001; 2000US-01846 624-FEB-2000; 2000US-01846 624-FEB-2000; 2000US-01846 624-FEB-2000; 2000US-01846 624-FEB-2000; 2000US-01846 627-MAR-2000; 2000US-01846 627-MAR-2000; 2000US-01846 627-MAR-2000; 2000US-01848 627-UN-2000; 2000US-01848 627-UN-2000; 2000US-0184 628-TUN-2000; 2000US-0184 628-TUN-2000; 2000US-02194 64-AUG-2000; 2000US-02194 64-AUG-2000; 2000US-02194 64-AUG-2000; 2000US-02194 64-AUG-2000; 2000US-02194 64-AUG-2000; 2000US-02295
human; immunosuppressive; antiarthritic; antirheumatic; optological; cardiant, vasotropic; corrobropredective; noctropic; immunoprotective; antibecterial; virucide; fungicide; optolafinalogical; hyperrolifesetive discretal; antibecterial; virucide; fungicide; optolafinalogical; hyperrolifesetive discretal; producide; fungicide; optolafinalogical; hyperrolifesetive discretal; antibecterial; producide; pro
קים
14 - SEP - 2000 21 - SEP - 2000 25 - SEP - 2000 26 - SEP - 2000 27 - SEP - 2000 27 - SEP - 2000 29 - SEP - 2000 29 - SEP - 2000 20 - OCT - 2000 20 - OCT - 2000 21 - OCT - 200
2000US - 02342 2000US - 02358 2000US - 02363 2000US - 02464 2000US - 02417 2000US - 02464 2000US - 02417 2000US - 02464 2000US - 02466 2000US

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В
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06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
11-DEC-2000;
                             antiinflammatory; antirheumatic; antiarthritic; in
antibacterial; endocrine; cardiant; central nervo
anti-HIV; fungicide; antimutagen; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. alzheimer's disorders e.g. corneal infection, and many other disorders listed in the specification. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage
                                                antiinflammatory;
antibacterial; en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked immunosorbant assays (ELISA). Disorders which are diagnosed or treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The
 dermatological;
               antiaggregant;
                                                                                   Human;
                                                                                                                                                                                                                      AAM25880 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                      capabilities, fat content, lipid, protein, carbohydrate, vitamins minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 11;
                                                                                                                                                                                       AAM25880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                prevent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JAN-2001;
                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                          4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention
                                                                                                                                                                                                                                                                                                         NSTCPIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001-488783/53.
                                                                                  cancer; ulcer; HIV infection; human immunodeficiency virus;
                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             secreted proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  food
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ntion relates to isolated nucleic acid molecules and their secreted proteins. The nucleic acids and proteins are used to treat or ameliorate a medical condition in e.g. humans, mice, goats, horses, cats, dogs, chickens or sheep. They
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID No 836;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0254719.

2000US-0251479.

2000US-0251858.

2000US-0251868.

2000US-0251869.

2000US-0251989.

2000US-0251990.

2000US-0254097.
                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                        10
                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  additives
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                                                                                                                   sequence
               haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                         76.9%;
57.1%;
                                                                                                                   SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or preservatives
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               980pp; English.
                                                                                                                     IJ
                 vulnerary; antiulcer;
                                                                                                                                                                                                                        231 AA
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                                                                                                                                                                                                                                                                                                                                                                                       Score 30; DB 22
Pred. No. 6e+02;
                                                                                                                   NO:1395
                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                               antiarthritic; immunosuppressive;
nt; central nervous system; viruci
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                                                                                                                                                                                                                                                                                                                                                                                                       Length 201;
                 osteopathic; eczema;
                               antianaemic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vitamins,
cytostatic;
                                                virucide;
                                                                                                                                                                                                                                                                                                                                                                       0;
                                 anaemia;
                                                                                                                                                                                                                                                                                                                                                                         Gaps
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AAY02654

AAY02654

standard;

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RESULT 12
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                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-DEC-1999;
21-JAN-2000;
25-APR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH99166 to AAH99904 encode the human proteins given in AAM25225 AAM25963. The proteins can have activities based on the tissues
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neurological disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rhinitis, asthma, Alzheimer's diseas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cells they are expressed in, such as: antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ААН99166 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 20; Page 286; 1217pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAH99821.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alzheimer's disease; Parkinson's disease; neurodegenerative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HYSE-) HYSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-DEC-2000;
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                                                                                                               116 NAECPAC
                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                    4 NXXCPXC 10
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                                                                                                                                                                                                                                                             Similarity 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human polynucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Liu
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                                                                                                                                                                                                                                                                                                                                                                                                                231
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; 2000US-0488725.
; 2000US-0552317.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease,
                                                                                                                                                                                                                                                                 Conservative
                                                                                                               122
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                                                                                                                                                                                                                                                                                                        76.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Parkinson's
                                                                                                                                                                                                                                                                                                    18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ides encoding polypeptides, e.g. cancer, ulcers and HI
                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                        Score 30;
Pred. No.
                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease,
                                                                                                                                                                                                                                                                                                        6
                                                                                                                                                                                                                                                                                                                                      DВ
                                                                                                                                                                                                                                                                                                .6e+02;
                                                                                                                                                                                                                                                                                                                                          22;
                                                                                                                                                                                                                                                                                                                                   Length 231;
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11-JUN-1999

(first entry)

secreted

protein

encoded by

gene 5 clone

HCNSP40

secreted protein; fusion protein; gene therapy; protein therapy;

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12-SEP-1997
08-JUL-1997
                                                                                                                                                                                                                                                                                          18-AUG-1997;
18-AUG-1997;
18-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis; tissuė; cancer; tumour; neurodėgenerativė disorder; leukaėmia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
                                                                                       New isolated human genes and the secreted polypeptides they encode useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09902546-A1
         This sequence represents a secreted human protein encoded by the clone detailed in the descriptor line. The gene can be used to grustion proteins by linking to the gene to a human immunoglobulin portion (e.g. AAX27302) for increasing the stability of the fused
                              This sequence represents a secreted hunclone detailed in the descriptor line.
                                                                                                                                                                                                                                                                                                                 18-AUG-1997;
18-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUL-1998
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18-AUG-1997;
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                                                                                                                                                                                                           (HUMA-)
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                                                                                                                                        1999-120770/10.
DB; AAX27315.
                                                                                                                                                                         r LA,
HS,
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                                                                                                                                                                                                                                                                                                                                                                             -1997
                                                                                                                                                                                                                                                                                                                                                                 -1997
                                                                                                                                                                                                                                                          1997
                                                                                                                                                                                                           HUMAN GENOME
                                                                   Page 322;
                                                                                                                                                                      Ebner R,
Rosen CA,
                                                                                                                                                                                                                               97US-0052803.
97US-0055684.
97US-0055722.
97US-0055947.
97US-0055949.
97US-0055959.
97US-0055959.
97US-0055954.
97US-0055954.
97US-0055964.
97US-0055964.
97US-0056866.
97US-0058666.
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97US-0051928.
97US-0051929.
97US-0051930.
97US-0051931.
97US-0051931.
97US-0052732.
97US-0052733.
97US-0052733.
97US-0052793.
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97US-0051919
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                                                                                                                                                                        Fischer CL, Ky
Ruben SM, Shi
the human protein only
                                                                  English.
                                                                                                                                                                      Kyaw H, Lafleur DW, :
                                                                                                                                                                        Li Y,
ng Z;
                                 to generate
                                            the gene
                                                                                                                                                                                    Moore
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AAZ98109 to AAZ98242 encode AAY87224 to AAY87357 which represent the human signal peptide-containing proteins HSPP-1 to HSPP-134. HSPPs have anticancer, anti-inflammatory, antimicrobial, nootropic, hepatotropic, neuroprotective, cardiovascular and antiasthmatic activities, and can

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Best Local
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                                                                                                                                                                                                                                                       26-JUN-1998;
31-JUL-1998;
01-OCT-1998;
11-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to 123 novel genes and their fragments (nucleic acid sequences: AAX27311-x27449; amino acid sequences AAY02650-Y02788) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polypucleotides. Specific uses are described for each of the 123 polynucleotides, based on which tissues they are most highly expressed in
                                                                                                                                                                                          Lal P, T
Akerblom
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; signal peptide-containing protein; HSPP; diagnosis; cancer; inflammation; cardiovascular disease; anticancer; anti-inflammatory; antimicrobial; nootropic; neuroprotective; cardiovascular; hepatotropic; antiasthmatic; gene therapy; cell proliferation; neurological disorder; reproductive disorder; developmental disorder; arteriosclerosis; cirrbosis; psoriasis; acquired immune deficiency syndrome; anaemia; asthma; Crohn's disease; infection; Alzheimer's disease; schizophrenia;
                                                                                      New human signal peptide-containing proteins useful in treatment, prevention and diagnosis of e.g. cancer, inflammation and cardiovascular disease –
                                                                                                                                         WPI; 2000-160673/14.
N-PSDB; AAZ98206.
                                                                                                                                                                                                                                                                                                                                                                                                                          muscular dystrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human signal peptide containing
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                                                                Claim
                                                                                                                                                                                                                               (INCY-)
                                                                                                                                                                                                                                                                                                                       25-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                      Parkinson's disease; Huntington's diseases; ovulatory defect;
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m IE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard;
                                                               Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   237 AA;
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                                                                                                                                                                                        Au-Young
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98US-0094983.
98US-0102686.
98US-0112129.
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57.1%;
                                                               English.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein HSPP-98
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6.7e+02;
thes 3;
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R, Hillman
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AC AAY
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PN W09
PN 02-
PR 02-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC be used in gene therapy. HSPPs can be used to treat or prevent disorders CC associated with decreased activity or function of HSPP. Antagonists of CC HSPP are used to treat or prevent disorders associated with increased CC activity or function of HSPP. Such diseases include cell proliferation CC (including cancer), inflammation, cardiovascular, neurological, CC reproductive or developmental disorders, (e.g. arteriosclerosis, CC cirihosis, psoriasis, acquired immune deficiency syndrome, anaemia, CC asthma, Crohn's disease, microbial or other infections, congestive or ischaemic heart disease, microbial or other infections, congestive or classases, schizophrenia, ovulatory defects, muscular dystrophy). HSPP CC diseases, schizophrenia, ovulatory defects, muscular dystrophy). HSPP, for CC detecting HSPP in standard hybridisation and amplification assays (for CC diagnosis and monitoring), in gene therapeutics, for detecting related sequences or genetic variations, and for chromosomal mapping. HSPP are also used to raise specific antibodies (Ab) and to screen for agonists and cc antagonists (potential therapeutic agents). Ab are used to diagnose, or antagonists, in competitive drug screens, and for purification of HSPP cc antagonists in competitive drug screens, and for purification of HSPP cc.
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Best L
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02-JUN-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76.9%; ilarity 57.1%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128
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 98US-0087607.
98US-0087759.
98US-0088021.
98US-0088025.
98US-0088028.
98US-0088028.
98US-008803.
98US-008803.
98US-0088326.
98US-0088327.
98US-0088327.
98US-0088327.
98US-008837.
98US-0088734.
98US-0088734.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polypeptide: PRO polypeptide: LDL receptor: TIE ligand:
   receptor immunoadhesin: gene mapping.
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Pred. No. 6.7e+02;
"""matches 3;
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98US - 0088824

98US - 0088825

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98US - 0088863

98US - 0089944

98US - 008953

98US - 0089947

98US - 0089947

98US - 0089947

98US - 0099445

98US - 0090445

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98US-0088741.
98US-0088742.
98US-0088810.
98US-0088811.
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18-AUG-1998
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20-AUG-1998
24-AUG-1998
26-AUG-1998
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17-AUG-1998;
17-AUG-1998;
                                The invention provides membrane-bound PRO polypeptides and polynucleotides encoding them. The PRO sequences of the invention were identified based on extracellular domain homology screening. The PRO sequences have homology with proteins including LDL receptors, TIE ligands and various enzymes. The membrane-bound proteins and receptor molecules are useful as pharmaceutical and diagnostic agents. Receptor immunoadhesins, for instance, can be used as therapeutic agents to block receptor-ligand interactions. The membrane-bound proteins can also be employed for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. The PRO encoding sequences are useful as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. PRO nucleic acid sequences will also be useful for the preparation of PRO polypeptides, especially by the procession of the propagation of PRO polypeptides, especially by the propagation of PRO polypeptides, especially by the polypeptides of the preparation of PRO polypeptides, especially by the polypeptides of the preparation of PRO polypeptides, especially by the polypeptides of the preparation of PRO polypeptides.
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N-PSDB; AAZ65061.
                                                                                                                                                                                                                     claim 12; Fig 212; 822pp; English.
                                                                                                                                                                                                                                                                                                            Wood WI,
                        by recombinant techniques
                                                                                                                                                                                                                                             Membrane-bound proteins and related nucleotide sequences
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Yuan J;
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98US-0095311.
98US-0095311.
98US-0095312.
98US-0095325.
98US-0096012.
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98US-0096014.
98US-0096757.
98US-0096757.
98US-0096779.
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                                                                                                                                                                                                                                                                                                                        Smith V,
                                                                                                                                                                                                                                                                                                                        Watanabe
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Sequence

B

(GETH ) GENENTECH INC

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RESULT 15

AAU29134

IID AAU293

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CX PRO PACO

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18-APR-2000;
18-APR-2000;
25-APR-2000;
25-APR-2000;
25-APR-2000;
03-MAY-2000;
03-MAY-2000;
02-JUN-2000;
02-JUN-2000;
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06-AVG-2000;
01-DEC-2000;
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11-APR-2000;
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11-APR-2000;
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04-APR-2000;
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Pred. No. 6.7e+02;
Pred. No. 6.7e+03;
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Search completed: December 13, 2002, 08:38:13 Job time: 5.63804 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention. CC The PRO polypeptides and their associated nucleic acids can be used to CC detect the presence of a tumour in a mammal by comparing the level of CC expression of a PRO polypeptide in a test sample of cells from the animal CC and a control sample of normal cells, whereby a higher level of CC expression in the test sample indicates the presence of a tumour in the CC mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats CC and rabbits but are preferably human. The polypeptides can be used to Stimulate tumour necrosis factor (TNF) alpha release from human blood, when contacted with it. A specific polypeptide can be used to stimulate tumour of differentiation of chondrocyte cells. The PRO CC proteins can be used to determine the presence of tumours and also CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, CC susceptibility to tumour development, particularly adrenal, lung, colon, 
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Best Local
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Pan J, Sm
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-602746/68.
N-PSDB; AAS46035.
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                                                                                                                                                                                                                      122 NAECPAC 128
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4; Conservative
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Smith V, Watanabe CK, Wood WI, Zhang Z;
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57.1%;
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1: /cgn2_6/ptcodata/2/pubpaa/US08_NEW_PUB.pep:*

2: /cgn2_6/ptcodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptcodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptcodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptcodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptcodata/2/pubpaa/US07_PUBCOMB.pep:*

7: /cgn2_6/ptcodata/2/pubpaa/PCTUS_PUBCOMB.pep:*

8: /cgn2_6/ptcodata/2/pubpaa/US08_PUBCOMB.pep:*

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851
1 MFQDPQERPRKLPQL
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Copyright (c) 1993 - 2002 Compugen Ltd
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result No.	Score	Query Match Length	Length I	DB	αι	Description
_	843	99.1	273	9	US-10-000-903-4	Sequence 4, Appli
2	843	99.1	292	9	US-10-000-903-10	Sequence 10, Appl
ω	843	99.1	371	9	US-10-000-903-6	σ,
4	843	99.1	390	9	US-10-000-903-14	14,
ر ت	469.5	55.2	278	9	US-10-000-903-21	Sequence 21, Appl
6	469.5	55.2	383	9	US-10-000-903-23	23,
7	80.5	9.5	256	10	US-09-756-186-2	e 2,
80	78.5	9.2	552	10	US-09-764-898-183	183
9	78.5	9.2	553	10	US-09-764-898-163	Sequence 163, App
10	78.5	9.2	4636	10	US-09-835-996A-33	Sequence 33, Appl
11	77.5	9.1	181	10	US-09-970-532-4	Sequence 4, Appli
12	77.5	9.1	471	10	US-09-970-532-2	Sequence 2, Appli
13	77	9.0	285	10	US-09-756-186-6	δ
14	76.5	9.0	162	10	US-09-798-789-18	Sequence 18, Appl
15	76	8.9	276	10	US-09-764-864-925	Sequence 925, App
16	76	8.9	468	10	US-09-864-761-37991	Sequence 37991, A
17	74.5	8.8	153	10	US-09-800-909-3	Sequence 3, Appli
18	74.5	8.8	153	10	US-09-884-987-4	Sequence 4, Appli
19	74.5	8.8	153	10	US-09-800-908-12	12,

45	44	43	42	41	40	39	38	37	36	<u>ა</u>	34	<u>კ</u>	32	31	30	29	28	27	26	25	24	23	22	21	
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8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8		8.8					8.8	0
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US-09-792-356-2	US-10-041-574-5	US-09-899-429A-27	US-09-899-429A-2	US-09-756-854-5	US-09-898-234-17	US-09-898-234-2	US-09-899-422-12	US-09-792-356-12	US-09-898-234-12	US-09-756-186-8	US-09-899-429A-8	US-09-899-429A-14	US-09-899-429A-12	US-09-899-429A-18	US-09-899-429A-10	US-09-899-429A-16	US-09-899-429A-20	US-09-798-789-22	US-09-798-789-9	US-09-899-429A-6	US-09-907-263-2	US-09-899-422-4	US-09-792-356-4	UŠ-09-899-429A-4	
2,	Sequence 5, Appli	Sequence 27, Appl	Sequence 2, Appli	Sequence 5, Appli	Sequence 17, Appl	Sequence 2, Appli	Sequence 12, Appl	Sequence 12, Appl	Sequence 12, Appl	Sequence 8, Appli	Sequence 8, Appli	Sequence 14, Appl	Sequence 12, Appl	Sequence 18, Appl	Sequence 10, Appl	Sequence 16, Appl	Sequence 20, Appl	Sequence 22, Appl	Sequence 9, Appli	Sequence 6, Appli	Sequence 2, Appli	Sequence 4, Appli	Sequence 4, Appli	Sequence 4, Appli	

## ALIGNMENTS

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LENGTH: 273
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                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                     Query Match 99.1%; Score 843; DB 9; Length 273; Best Local Similarity 99.3%; Pred. No. 4.3e-79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Homo sapien
  234
                  121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                               174
                                                                                                                                                         114 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 173
                                                                                                                  61
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                                                                                                AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 264
                                                                           AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Gerard, Catherine Marie Ghislaine
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; ORGANISM: Homo sapien
US-10-000-903-10
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APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
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Best Local Similarity
Matches 150; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version SEQ ID NO 10
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Matches 150;
                   Query Match
Best Local :
                                                                                                                                                                   SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/10000903 Publication No. US20020182221A1
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                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
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APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Er
APPLICANT: Gerard, Catherine Mar:
APPLICANT: Lombardo-Bencheikh, An
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PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR APPLICATION TO SERVICE OF THE PRIOR FILING DATE: 1997-08-22
NUMBER OF THE PRIOR FILING DATE: 1997-08-22
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FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 23
                                                                                                 TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
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                       Similarity
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Gerard, Catherine Marie Ghislaine
Lombardo-Bencheikh, Angela
  Conservative
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                   99.1%;
99.3%;
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0;
Score 843; DB 9
Pred. No. 6e-79;
0; Mismatches
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Pred. No. 4.6e-79;
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                                    DB 9;
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                                      Length 371;
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CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 14
LENGTH: 390
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT APPLICATION NUMBER: PCT/EP98/05285
PRIOR APPLICATION NUMBER: PCT/EP98/05285
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                                                                                                                                                                                                                                   ; Sequence 21, Ap
; Publication No.
                                                                                                                                                                                                                                                                           US-10-000-903-21
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Best Local Similarity 99.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Publication No. US20020182221A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14,
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APPLICANT: Cabezon Silva,
APPLICANT: Delisse, Annerl
APPLICANT: Gerard, Cather:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 283
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No. US20020182221A1
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Delisse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
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Pred. No. 6.4e-79;
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\* PRIOR ELLING, DATE: 1997-08-22

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SEQ ID NO 21:

SELONGTH: 278

TYPE: PRT *

ORGANISM: Homo sapien

US-10-000-903-21
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             RESULT 7
US-09-756-186-2
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LENGTH: 383
TYPE: PRT
Sequence 2, Application US/09756186
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PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
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CURRENT FILING DATE: 2001-10-01
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SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: Gerard, Catherine Marie Ghislaine
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SOFTWARE: FastSEQ for Windows Version 3.0
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                                                                                                     122 KQRFHNIRGRWTGRCMSCCRSSR-----TRRETQL 151
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                                                                                 235
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                                                                                                                                                                  62 VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK 121
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nes 87; Conserv
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                                                                                                                                                                                                               FEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTEVFEFAFKDLFVVYRDSIPHA 174
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                                                                              KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV 269
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87; Conserv
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No. US20020182221A1
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56.1%;
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Pred. No. 6.8e-41;
                                                                                                                                                                                                                                                                                               Score 469.5; DB 9
Pred. No. 9.7e-41;
                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                             DB 9;
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US-09-764-898-183
                       APPLICANT: Rosen et al.

APPLICANT: Rosen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PVZ01

CURRENT APPLICATION NUMBER: US/09/764,898

CURRENT FILING DATE: 2001-01-17

Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 311
                                                                                                                                                                 GENERAL INFORMATION:
SOFTWARE: Pa
SEQ ID NO 183
                                                                                                                                                                                     Sequence 183, Application US/09764898 Patent No. US20020090673A1
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Best Local S
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC-DOS/MS-DOS

PPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 256 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 628-5197
TELEFAX: (202) 737-3528
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APPLICATION NUMBER:
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APPLICANT: Chappel, Scott C.
TITLE OF INVENTION: HYBRID PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                   178 ENPFFSQPGAPILQCMGCCFSRAYPTPLRSKKT 210
                                                                                                                                                                                                                                                                                                                                      122 KQRFHNIRGRWTGRCMSCC-----RSSRT 145
                                                                                                                                                                                                                                                                                                                                                                            122 LFQCFNCSLCLNGTVHLSCQEKQNTVCTCHAGFFLRENECVSCAGAAPGCPECTL----Q 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28 LECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKYSEYRHYCYSLYGTT 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Browdy, Roger L.
REGISTRATION NUMBER: 25,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     82 LSCSKCRKEMGQVEI-----SSCTVDRD----TVCG-CRK-----NQYRHY----WSEN 121
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37; Conserv
               PatentIn Ver.
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Pred. No. 0.37
18; Mismatches
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1.37;
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LENGTH: 553
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (393)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-898-163
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; ORGANISM: Homo sapiens
US-09-764-898-183
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US-09-835-996A-33
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US-09-764-898-163
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                     Sequence 33, Application US/09835996A Patent No. US20020142953A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Best Local :
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APPLICANT:
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APPLICANT:
APPLICANT:
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                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 311
APPLICANT:
                                                             APPLICANT:
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26; Conserv
              Wehrman, 'rom
Drmanac, Radoje
Ren, Felyan
'lan, Xiahong
                                                                                                                                                                 Loeb, Debra
Montgomery, Julie
Tang, Y. Tom
                                                                                                                      zhou, Ping
Goodrich, Ryle
Liu, Chenghua
                                                                                                                                                                                                                        Ballinger, Dennis
             Wang,
                                                                                         Asundi, Ving
Zhao, Qing
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24.5%;
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APPLICANT: Kehril, Jr., Marcus
APPLICANT: Lee, Eun-Kyung
APPLICANT: Lee, Eun-Kyung
APPLICANT: Mwangi, Simon
TITLE OF INVENTION: BOVINE TUMOR NECROSIS FACTOR RECTITLE OF INVENTION: BOVINE TUMOR NECROSIS FACTOR RECTITLE REFERENCE: 08411-018001
CURRENT APPLICATION NUMBER: US/09/970,532
CURRENT FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 09/513,007
PRIOR PILING DATE: 2001-10-03
PRIOR FILING DATE: 2001-02-25
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                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/09970532 Patent No. US20020076765A1
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                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 09/598,042 PRIOR FILING DATE: 2000-06-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 09/631,451
PRIOR FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MATERIALS AND METHODS RELATING FILE REFERENCE: 28110/35915A
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140 -- CRSSRTRR 147
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                                                                                                                       LSCSRCRDEMFQVEI-----SPCVVDRD----TVCG-CRK----
                                                                             LEQQYNKPLCDLLIRCINCQKPLCP-----EEKQRHLDKKQRFHNIRGRWTGRCMSC 139
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ilarity 24.5%;
Conservative 11
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                                     -GFRCLNCS--LCPNGTVNIPCQERQDTICHCHMGFFLKG---AKCISC
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Pred. No. 15;
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Db 154 HDCKNKECEK 163

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RESULT 12
US-09-970-532-2
Sequence 2, Application US/09970532
Patent No. US20020076765A1
GENERAL INFORMATION:
APPLICANT: Taylor, J. Michael
APPLICANT: Kehrli, Jr., Marcus
APPLICANT: Kehrli, Jr., Marcus
APPLICANT: Kehrli, Jr., Marcus
APPLICANT: Manangi, Simon
TITLE OF INVENTION: BOVINE TUMOR NECROSIS FACTOR RECEPTOR-1
TITLE OF INVENTION: AND METHODS OF USE
FILE REFERENCE: 08411-018001
CURRENT APPLICATION NUMBER: US/09/970,532
CURRENT APPLICATION NUMBER: 09/513,007
PRIOR APPLICATION NUMBER: 09/513,007
PRIOR FILING DATE: 2001-10-03
PRIOR FILING DATE: 2000-02-25
NUMBER OF SEQ ID NOS: 8
SOSTWARE: FastSEQ for Windows Version 4.0
SEQ:ID NO 2
LENGTH: 471:
TYPE: PRT
ORGANISM: Bos taurus
US-09-970-532-2
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APPLICANT: Campbell, Robert K.
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                                                                                                               COUNTRY: USA
ZIP: 22207
ZIP: 22207
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/756,186
                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Campbell, Robert K.
APPLICANT: Jameson, Bradford A.
APPLICANT: Chappel, Scott C.
TITLE OF INVENTION: HYBRID PROTEINS
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street N.W., Ste. 300
CITY. Washington
               FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/804,166
                                                                                                                                                                                                                                                                                                                                          STREET: 419 Seven:
CITY: Washington
STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183 HDCKNKECEK 192
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FILING DATE:
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	QY 88 LEQQYMKELCULLIKCINCQKFUCFEKKQNFULIKKQRFULIKKGKWTGRCMSCCKSKTRK 14/    1
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	Qy 28 LECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKYSEYRHYCYSLYGTT 87
7	Query Match 9.0%; Score 76.5; DB 10; Length 162; Best Local Similarity 27.4%; Pred. No. 0.57; Matches 34; Conservative 15; Mismatches 46; Indels 29; Gaps
	ORGANI FEATUR OTHER S-09-798-
	NUMBER SOFTWAI SEQ ID I LENGTI
	; FILE REFERENCE: A-68990-1/RFT/RMS/RMK; CURRENT APPLICATION NUMBER: US/09/798,789 ; CURRENT FILING DATE: 2001-03-02 ; PRIOR APPLICATION NUMBER: US 60/186,427 ; PRIOR FILING DATE: 2000-03-02
	; APPLICANT: DANIYAT, BASSII ; APPLICANT: FILIKOV, ANTON ; TITLE OF INVENTION: DESIGN AND DISCOVERY OF PROTEIN BASED THE ALPHA ; TITLE OF INVENTION: VARIANTS FOR THE TREATMENT OF THE ALPHA RELATED ; TITLE OF INVENTION: DISORDERS
	RESULT 14 US-09-798-789-18 US-09-6-18, Application US/09798789 Patent No. US2002009780A1 GENERAL INFORMATION:
	Db 238 KT 239
	Qy 144 RT 145
	Db 182 ENVKGTEDSGTTAGAAPGCPECTLQENPFFSQPGAPILQCMGCCFSRAYPTPLRSK 237
	122 LFQCFNCTLCLNGTVHLSCQEKQNTVCTCHAGFFLRENECVSCSNCKKSLECTKLSLPQI
	88 LEQQYNKPLC
	Qy 28 LECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKYSEYRHYCYSLYGTT 87
٥	Query Match 9.0%; Score 77; DB 10; Length 285; Best Local Similarity 20.9%; Pred. No. 0.95; Matches 38; Conservative 18; Mismatches 38; Indels 88; Gaps
	TYPE: TOPOLOG MOLECULE JS-09-756-186
	: ILLEFAA: (204) /3/3526 ; INFORMATION FOR SEQ ID NO: 6: ; SEQUENCE CHARACTERISTICS: ; LENGTH: 285 amino acids
	REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION TELEPHONE: (202) 628-519
	ATTORNEY/AGENT INFORMATION: NAME: Browdy, Roger L. REGISTRATION NUMBER: 25,618

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GENERAL INCOMMATION: NO. 10.000.

GENERAL INFORMATION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: prz23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILLING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 1792
SOFTWARE: PATELING DATE: 2.0
SEQ ID NO 925
LENGTH: 276
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (198)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (203)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (229)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (229)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
Search completed: December 13, 2002, 08:46:16 Job time : 16.8221 secs
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; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-764-864-925
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US-09-764-864-925
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## ALIGNMENTS

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RESULT 1
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OC Viru
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Q89755;
01-NOV-1996
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01-JUN-2001
SPECIES-Human papillomavirus type 16; STRAIN-AS, EA7768T, AND EA7496T; van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. EMBL; U34126; AAA91673.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                     SPECIES=Human papillomavirus;
Farmer A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the L2, and L1 coding segments."; J. Virol. 69:7743-7753(1995).
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MEDLINE=96079021; PubMed=7494284;
Yamada T., Wheeler C.M., Halpern A.L., Stewart A.C., Hildesheim
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Human papillomavirus type 16.
Viruses; dsDNA viruses, no RNA stage;
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Watts K.J., Thompson.
"Sequence variation and physical cancer isolates from Australia and Necervical Cancer (Australia)

EMBL; AF404697; AALO1351.1; -...

Thearpro; IPR001334; E6.
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EMBL; U34123; AAA91670.1; -.
EMBL; AJ388066; CAB45124.1; -.
EMBL; AJ388056; CAB45104.1; -.
EMBL; AJ388061; CAB45114.1; -.
Interpro; IPRO01334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 151 AA; 18334 MW; F
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01-JUN-2001 (TremBLz
Early transforming p
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                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=Human papillomavirus type 16; STRAIN=EC169GDEL; van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
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SPECIES=Human papillomavirus
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Farmer A.D.;
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; U34133; AAA91680.1;
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  KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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AJ388057; CAB45106.1; -.
AF327851; AAG45940.1; -.
Pro; IPR001334; E6.
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Pred. No. 2e-84;
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01-NOV-1999
01-JUN-2002
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Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AF125673; AAD3627.1; -.
EMBL; AF486322; AAD36627.1; -.
InterPro; IDR001334; E6.
Pfam; PF00518; E6; 1.
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 Human papillomavirus type Viruses; dsDNA viruses, no Papillomavirus. NCBI_TaxID=10581;
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Submitted (FEB-1999)
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16w12E, complete genome (E6 protein).
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Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AF486318; AAL96633.1; -.
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Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H.,
Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic varia
for cervical neoplasia in Southern China.";
submitted (FEB-2002) to the EMBL/GenBank/DDBJ
EMBL; AF486316; AAL96621.;
-
SEQUENCE 158 AA; 19188 MW; O1FEF5B1D21AF7E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN-E-C442T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Papillomavirus.
NCBI_TaxID=10581;
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SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus
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149; Conserv
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Similarity 98.7%;
49; Conservative
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                    PRELIMINARY;
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Pred. No. 2.1e-84;
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Pred. No. 2.1e-84;
1; Mismatches 1
                    PRT;
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Best Local
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Q9W931;
Q1-NCV-1999
Q1-NCV-1999
Q1-JUN-20Q1
E6 protein.
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01-NOV-1996 (TrEMBL:
01-JUN-2001 (TrEMBL:
Early transforming)
van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F. Verheljen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. EMBL; AJ388059; CAB45101.1; -. EMBL; AJ388058; CAB45101.1; -. EMBL; AJ388058; CAB45101.; -.
                                                                                                                                                                           Human papillomavirus ty
Viruses; dsDNA viruses,
Papillomavirus.
PCBI_TaxID=10581;
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EMBL; U341
EMBL; U341
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                                                                                                                              SEQUENCE FROM N.A. STRAIN-EA246T.2;
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NCBI_TaxID=10566;
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Viruses; dsDNA viruses,
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Pred. No. 2.6e-84;
1; Mismatches 1
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RESULT
Q9WMP5
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DT 0:
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Q8QHT0
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Best Loc
Matches
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Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Li Cheung J.L.K., Xu L.Y., Cheung A.F.;
Cheung J.L.K., Xu L.Y., Cheung A.F., Li W.W.H., Li W.W.H., Li W.Y., Cheung A.F.;
Cheung J.L.K., Xu L.Y., Cheung A.F.;
Cheung J.L.K., Xu L.Y., Cheung A.F., Li W.H., Li W.W.H., Li W.H., Li W.H.,
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Best Local
  Q9WMP5;
01-NOV-1999
01-NOV-1999
01-DEC-2001
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01-JUN-2002
01-JUN-2002
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EMBL; AF4
SEQUENCE
                                                                                Q9WMP5
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SEQUENCE 151
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STRAIN-E-G276T, AND E-G276G442T;

STRAIN-E-G276T, Cheung T.H., Li W.W.H., Lo K. Chan P.K.S., Lam C.W., Cheung A.F.;

Cheung J.L.K., Xu L.Y., Cheng A.F.;

Primman papillomavirus type 16 intratypic variant inf

for cervical neoplasia in Southern China.";

Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databe

R EMBL; AF486315; AAL96620.1; -.

R EMBL; AF486323; AAL96628.1; -.

SEQUENCE 158 AA; 19160 MW; AFF015533FC7FAF7 CRC(
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EMBL; AJ242681; CAB45381.1; ...
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Papillomavirus
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"Analysis of Human papillomavirus type 16 E6 variants in relation p53 codon 72 polymorphism genotype in cervical carcinogenesis.";
Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ388064; CAB45120.1; -.
EMBL; AJ388065; CAB45116.1; -.
Interpro; IPR001334; E6.
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Q919D4;
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E6 protein (
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Papillomavirus
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                      Watts K.J., Thompson C.H., Cossart Y.E., Rose B.R.;
"Sequence variation and physical state of human papillomavirus cervical cancer isolates from Australia and New Caledonia.";
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF404693; AAL01343.1; -.
InterPro; IPR001334; E6.
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NCBI_TaxID=10581;
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A Cheung J.L.K., xu L.Y., Cheng A.F.;
T. Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
I Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
IR EMBL; AF187866; AAF1392.1; -.
IR EMBL; AF486304; AAL96609.1; -.
IR EMBL; AF486305; AAL96610.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 1 Viruses; dsDNA viruses, no Papillomavirus. NCBI_TaxID=10581;
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   GenCore version 5.1.3 (c) 1993 - 2002 Compugen Ltd
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or send an email to license@isb-sib.ch)
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                                                                                                                                                                                                                                                                                                                                                                                                        use by non-profit institutions as long
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Marich J.E., Pontsler A.V., Rice S.M., McGraw K.A., Dubensky T.W.; "The phylogenetic relationship and complete nucleotide sequence of human papillomavirus type 35."; virology 186:770-776(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE-92124753; PubMed-1310198;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POTENTIAL OF THIS VIRUS (ASSOCIATED WITH CANCER OF THE UTERINE CERVIX).
FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: EXHIBIT A STRONG, BUT STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBCELLULAR LOCATION: Nuclear matrix-associated.
                   MFQDPAERPYKLHDLCNEVEESIHEICLNCVYCKQELQRSEVYDFACYDLCIVYREGQPY
                                                 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNFY
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                                                                                                     Similarity
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103
149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rected sequencing of human papillomavirus Microbiol. Immunol. 186:13-31(1994).
                                                                                    Conservative
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23, Last sequence up
41, Last annotation
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18045 MW;
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71.5%;
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D RNA stage; Papillomaviridae;
                                                                                     14;
                                                                                  Score 592; DB
Pred. No. 5.2e
14; Mismatches
                                                                                                                                            POTENTIAL.
; C605D19AF3935021 CRC64;
                                                                                                                                                                                      POTENTIAL.
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                                                                                  .2e-50;
les 27;
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                                                                                                                   Length 149;
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RESULT 4
VE6_HPV33
ID VE6_H
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VE6_HPV33
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4

STANDARD;

PRT;

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Query Match
Best Local S
Matches 99
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P17386;
01-AUG-1990
01-AUG-1990
15-JUN-2002
                                                                                                                                                                                                                                                                                        Oncogene.
ZN_FING
ZN_FING
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-associated virus.";
Virology 171:306-311(1989).
-I- FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POTENTIAL OF THIS VIRUS (CERVICAL NEOPLASIA-ASSOCIATED VIRUS).
-I- FUNCTION: EXHLBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE-89299478; PubMed=2545036;
Goldsborough M.D., Disilvestre D.,
                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; J04353; AAA46
PIR; A32444; W6WL31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Viruses;
                                                                                                                                                                                                                                                                                                                                                                Early protein; DNA-binding; Nuclear protein; Zinc-finger;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10585;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                    [nterPro;
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                                                                                                                                                                              MEQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                       AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                              MFKNPAERPRKLHELSSALEIPYDELRLNCVYCKGQLTETEVLDFAFTDLTIVYRDDTPH
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 KKKRFHNIGGRWTGRCIACWR--RPRTETQV
                                                                      GVCTKCLRFYSKVSEFRWYRYSVYGTTLEKLTNKGICDLLIRCITCQRPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                   PF00518;
                                                                                                                                                                                                                  Similarity 65.0
99; Conservative
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103
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(Rel. 15, Last sequence update)
(Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA46950.1;
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139
17713
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                                                                                                                                                                                                                                   Score 538;
Pred. No. 7
                                                                                                                                                                                                                                                                                                         POTENTIAL
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                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                    Length 149;
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AC P2655

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DE E6 pr

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Best Local
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P26555;
01-AUG-1992
01-AUG-1992
01-JUN-1994
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01-JAN-1988
01-JAN-1988
15-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OF THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POOF THIS VIRUS (CERVICAL NEOPLASIA-ASSOCIATED VIRUS).
-I- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR STRANDED DNA (IN VITRO).
-I- SUBCELLULAR LOCATION: Nuclear matrix-associated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type i Viruses; dsDNA viruses, no Papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Genome organization and nucleotide sequence of human type 33, which is associated with cervical cancer."; J. Virol. 58:991-995(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the European Bioinformatics Institute.
                                          Papillomavirus.
NCBI_TaxID=10598;
                                                                                       Viruses;
                                                                                                            Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIR; A03683; W6WL33.
InterPro; IPR001334; E6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; M12732; AAA46958.1;
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  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Early protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                         protein.
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een the Swiss Institute of Bioinformatics and the EMBL outst
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                       LNKRFHNISGRWAGRCAACWRS--RRRETAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MFQDTEEKPRTLHDLCQALETTIHNIELQCVECKKPLQRSEVYDFAFADLTVVYREGNPF
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                                                                                         dsDNA viruses,
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(Rel. 29, Last annotation updat
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139 P
17652 MW;
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o RNA stage; Papillomaviridae;
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                                                                                         RNA
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POTENTIAL.
                                                                                                                                                                                                                                                                        PRT;
                                                                                         stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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P36814;
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"Human papillomavirus type 58 DNA sequence.";
Virology 185:424-427(1991).
-1- FUNCTION: EXHIBIT A STRONG, BUT NON SPECI
                  use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                  This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restude by non-profit institutions as long as its content
                                                                                                                                                                                                                  "Primer-directed sequencing of human papillomavirus types."; Curr. Top. Microbiol. Immunol. 186:13-31(1994).
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE STRANDED DNA (IN VITRO).
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PIR; E36779; W6WL58.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
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MEDLINE=94265501; PubMed=8205838;
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01-NOV-1995
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    -!- SUBCELLULAR LOCATION: Nuclear matrix-associated

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    -!- SUBCELLULAR LOCATION: Nuclear matrix-associated.

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NG 30 66 POTENTIAL.
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ZN_FING 104
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Papillomavirus.
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          FPNPEERPYKLPALCEEVNISIHEIELDCVYCERQLYRCEVYDFIFRDLCVVYRKGKPUG
                              FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA
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S36573; S36573.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
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29,
30,
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139
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                                                                                                                                                                                                                                                                     Ε6.
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                                                                                                        58.6%;
61.1%;
                                                                                                                                                                   17735
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59.6%;
63.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
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                                                                                                                                                                     M.
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                                                                                   17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA stage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nuclear protein;
POTENTIAL.
POTENTIAL.
                                                                                     Score 499; DB
Pred. No. 4.le
17; Mismatches
                                                                                                                                                                                                                          Nuclear protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 507; Db 1
                                                                                                                                                                                      POTENTIAL.
                                                                                                                                                                   E2FCC6E62E4AF0DA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C5E9DECE341AB0DE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         update)
                                                                                                      .le-41;
                                                                                                                          BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
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                                                                                                                                                                                                                          Zinc-finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34;
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                                                                                                                          Length 148,
                                                                                       Indels
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RESULT 8
VEG_HPVD
ID VEG_HP
AC P5080
AC P5080
DT 01-NO
DT 01-NO
DT 01-NO
DT E6 PT
GN E6.
OS Human
OC Virus
OC Papill
AR FOrsl
RR MEDLLI
RR MEDLLI
RR FORSL
RT Prodl
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RT Prodl
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RT Prodl
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CC -1
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                                                                                                                                                                                                                                                               Query Match
Best Local :
                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                       Early protein;
ZN_FING 32
ZN_FING 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-1996
01-OCT-1996
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Clin.
-!- FUNCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VE6_HPV70
P50804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Human papillomavirus type 70 genome cloned products: complete nucleotide sequence and J. Clin. Microbiol. 34:802-809(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Longuet M., Beaudenon S., Orth G.;
"Two novel genital human papillomavirus (HPV)
related to the potentially oncogenic HPV39.";
J. Clin. Microbiol. 34:738-744(1996).
                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                     CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U21941; AAC54850.1; EMBL; U22461; AAC54880.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=97060129; PubMed=8904450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Human papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=96249586; PubMed=8815087;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=39457;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus
Viruses; dsDNA viruse
                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR00133
Pfam; PF00518; E6;
                        122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBCELLULAR LOCATION: Nuclear matrix-associated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: EXHIBIT A STRONG, BUT STRANDED DNA (IN VITRO).
KQRFHNIRGRWTGRCMSCCRSS-----
                                                                  ACQKCIKFHAKVRELRHYSNSVYATTLESITNTKLYNLSIRCMSCLKPLCPAEKLRHVNT
                                                                                        VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK 121
                                                                                                                                                  FPNPAERPYKLPDLCTALDTTLHDITIDCVYCKTQLQQTEVYEFAFSDLFIVYRNGEPYA
                                                                                                                                                                            FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIYYRDGNPYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NKRFHQIADQWTGRCTQCWRPSAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                               158 AA;
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(Rel.
(Rel.
                                                                                                                                                                                                                                        Conservative
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35, Last
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141
100
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                                                                                                                                                                                                                                                                                                                               MW;
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annotation
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POTENTIAL.

N -> D (IN REF.
                                                                                                                                                                                                                                                          Score 483.5;
Pred. No. 1.
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                                                                                                                                                                                                                                        Mismatches
                      RTRRETQL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            update)
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                                                                                                                                                                                                                                        Indels
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124

KRRFHQIAGSYTGQCRHCWTSNREDRRRIRRETQV 158

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VE6_HPV51
ID VE6_HPV51
AC P26554;
DT 01-AUG-1992
DT 01-JUN-1994
DE 6 protein.
GN E6
OS Human papill.
OC Viruses; dsD
OC Papillomavir.
OX NCBI_TaxID-1
                                                                                                                                                                                                                                                                                                                                                      RESULT
VE6_HPV
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01-0CT-1996
01-0CT-1996
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P54667;
                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00518; E6; 1. Early protein; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Two novel genital human papillomavirus (HPV) types, HPV68 related to the potentially oncogenic HPV39."; J. Clin. Microbiol. 34:738-744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Papillomavirus.
NCBI_TaxID=45240;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E6 protein.
Human papillomavirus tyr
Viruses; dsDNA viruses,
Papillomavirus.
NCBI_TaxID=10595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDED DNA (IN VITRO).
-!- SUBCELLULAR LOCATION: Nuclear matrix-associated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE-97060129; PubMed-8904450;
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                  ZN_FING
                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001334; E6.
                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X67160; CAA47632.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                             or send an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Longuet M., Beaudenon S., Orth G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus
                                                                                                                                                                       123
                                                                                                                                                                                           121 KKORFHNIRGRWTGRCMSCCRSS-----RTRRETQL 151
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                                                                                                                                                                       TKRRLHKIAGNFTGQCRHCWTSKREDRRRIRQETQV 158
                                                                                                                                                                                                                                        AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                   AACQSCIKFYAKIRELRYYSESVYATTLETITNTKLYNLLIRCMSCLKPLCPAEKLRHLT
                                                                                                                                                                                                                                                              LFHNPEERPYKLPDLCRTLDTTLHDVTIDCVYCRRQLQRTEVYEFAFSDLCVVYRDGVPF
                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                             equires a license agreement (See http://www.isb-sib.ch/announce/email to license@isb-sib.ch).
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(Rel.
(Rel.
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(Rel.
(Rel.
                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                               STANDARD;
                                                                  23, Created)
23, Last sequence
29, Last annotations
                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                      18796 MW;
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                                type
                                                                                                                                                                                                                                                                                                                    56.7%;
55.1%;
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Last
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                                                                 Last sequence up
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                       RNA
                                                                                                                                                                                                                                                                                                         24;
                                                                                                                                                                                                                                                                                                                                                                           Nuclear protein; Zinc-finger POTENTIAL.
                                                                                                                                                                                                                                                                                                        Pred. No. 1.7e-39; mismatches 41
                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL
                                                                                                                                                                                                                                                                                                                              Score 482.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                     46B37939CFBA6596 CRC64;
                       stage; Papillomaviridae;
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                                                                             update)
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RESULT 11
VE6_HPV45
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Best Local
                                                                                                                                                                                                                                                                                              01-MAY-1991
01-JUN-1994
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                          VE6_HPV45
P21735;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                    Delius H., Hofmann B.;
"Primer-directed sequencing of human papillomavirus
"Primer-Top. Microbiol. Immunol. 186:13-31(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Early protein; DNA-binding; Nuclear protein; Zinc-finger. ZN_FING 30 66 POTENTIAL. ZN_FING 103 139 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus type 51.";
Virol. 65:4216-4225(1991).
-i-FUNCTION: EXHIBIT A STRONG,
-i-STRANDED DNA (IN VITRO)
                                        Kaplan J.B., Burk R.D.;
Submitted (AUG-1990) to the EMBL/GenBank/DDBJ databases
-i- FUNCTION: THIS PROTEIN HAS TRANSFORMING ACTIVITY IN
                                                                                                                                                                                                      Papillomavirus.
NCBI_TaxID=10593;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR001334; E6. Pfam; PF00518; E6; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lungu O., Crum C.P., Silverstein S.J.;
"Biologic properties and nucleotide sequence analysis
                             -
                                                                                                                                                           MEDLINE=94265501; PubMed=8205838;
                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                       Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR; E40415; W6WL51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; M62877; -; NOT_ANNOTATED_CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SUBCELLULAR LOCATION: Nuclear matrix-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=91303675;
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SEQUENCE FROM N.A.
<del>-</del>
                                                                                    SEQUENCE FROM N.A
                                                                                                                                                                                                                                                  Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                 121
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SUBCELLULAR LOCATION: Nuclear matrix-associated
                          FUNCTION: EXHIBIT A STRONG,
            STRANDED DNA (IN VITRO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MFEDKRERPRTLHELCEALNVSMHNIQVVCVYCKKELCRADVYNVAFTEIKIVYRDNNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                 EKKRFHEIAGRWTGQCANCWQRTRQRNETQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVCKQCLLFYSKIREYRRYSRSVYGTTLEAITKKSLYDLSIRCHRCQRPLGPEEKQKLVD
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103
151 AA;
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(Rel.
(Rel.
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                                                                                                                                                                                                                                                                                                                                                         STANDARD;
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29,
41,
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                                                                                                                                                                                                                                     type (es, no
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Last sequence up
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                                                                                                                                                                                                                                     stage;
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                             NON
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                             SPECIFIC
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                             AFFINITY
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                             DOUBLE
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Best Local
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6_HPV18
                                     SEQUENCE FROM N.A.
MEDLINE-88188247; Pub
Inagaki Y., Tsunokawa
Terada M., Sugimura T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONFLICT
                                                                                                                                     MEDLINE-86306665; PubMed-3018129; Matlashewski G., Banks L., Wu-Liao J., Surpherssion of human papillomavirus bacteria and the production of anti-E6 a J., Gen. Virol. 67:1909-1916(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oncogene.
ZN_FING
ZN_FING
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                   "Nucleotide sequence and comparative analysis of the human papiliomavirus type 18 genome. Phylogeny of papiliomaviruses repeated structure of the E6 and E7 gene products."; J. Mol. Biol. 193:599-608(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                     Cole
                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE-87283882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus ty
Viruses; dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-1988
15-JUN-2002
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InterPro; IPR001334; E6.
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                      'Nucleotide
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                                                                                                                                                                                                                                                                                                                                                                     S.T., Danos 0.;
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M38198; AAA46973.1;
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protein; DNA-binding;
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                                           Tsunokawa Y.,
Sugimura T.;
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41,
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141
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118
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o RNA stage;
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Pred. No. 1.2e
Pred. Mismatches
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I -> N (IN REF. 2).
R -> A (IN REF. 2).
F1CF10DD33AA4C3E (
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                                                                                                                                                            , Spence P., F
us type 18 E6
6 antibodies."
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                  papillomavirus type
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                                                            Nakanishi
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RESULT 13
VE6_HPVME
ID VE6_H
AC P2796
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Best Local
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EMBL; X05015; CAA28664.1;
EMBL; M20325; AAA99514.1;
EMBL; M20728; AAA46946.1;
EMBL; X04773; CAA28466.1;
EMBL; X04773; CAA28466.1;
                                                                                                                                                                                                                                                                                          ZN_FING
                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the EUROpean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=87218459; PubMed=3034571; Seedorf K., Oltersdorf T., Kraemer G., Rc "Identification of early proteins of the 16 (HPV 16) and type 18 (HPV 18) in cervices of J. 6:139-144(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grossman S.R., Laimins L.A.;
"E6 protein of human papillomavirus
Oncogene 4:1089-1093(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-89385606; PubMed-2550872;
                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                CONFLICT
                                                                                                                                                                                                                                                                                                                  Oncogene.
                                                                                                                                                                                                                                                                                                                             Early protein; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBO J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Different human cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-87053870;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                transcripts in HeLa cells.";
J. Virol. 62:1640-1646(1988).
                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZINC-BINDING
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                                                                                                                                                                                  FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA
                                                                       KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV
                                                                                                                                   VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK
                                                                                                                                                                                                                                                                                                                                                                G26251;
                                                                                              KORFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
                                                                                                                       ACHKCIDFYSRIRELRHYSDSVYGDTLEKLTNTGLYNLLIRCLRCQKPLNPAEKLRHLNE
                                                                                                                                                                      FEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTEVFEFAFKDLFVVYRDSIPHA
                                                                                                                                                                                                                                                                                                                                          PF00518;
                                                                                                                                                                                                                                                                                                                                                                             A06328; CAA00542.1;
                                                                                                                                                                                                                  Similarity
87; Conserv
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00518; E6; 1.
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105
22
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                                                                                                                                                                                                                                                                                                                                                                W6WL18.
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141
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                                                                                                                                                                                                                                                                                                                                                                             carcinoma cell lines
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                                                                                                                                                                                                                                                                                                                             Nuclear protein; Zinc-finger;
                                                                                                                                                                                                                  Score 469.5; DB 1
Pred. No. 2.9e-38;
2; Mismatches 41
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5BCF13CF43D157FA CRC64;
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he human pa
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                                                                                                                                                                                                                                           DB 1;
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carcinoma cells.";
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type
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VE6\_HPVME P27962;

STANDARD;

PRT;

158

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RESULT
VE6_HVE
AC P2
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C GN E66
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01-AUG-1992
01-JUN-1994
                                                                                                                                                                                                                    P24835;
01-MAR-1992
01-MAR-1992
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Early protein; I
ZN_FING 32
ZN_FING 106
SEQUENCE 158 A
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Early
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
SEQUENCE FROM N.A.
MEDLINS-91135017; PubMed-1847266;
Volpers C., Streeck R.E.;
"Genome organization and nucleoti
type 39.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Virol. 65:5564-5568(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Reuter S., Delius H., Kahn T., Hofn "Characterization of a novel human carcinoma cell line ME180.";
                                                                                                                                             Human papillomavirus type : Viruses; dsDNA viruses, no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                              Papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    between
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses;
                                                                                                         NCBI_TaxID=10588;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 465.5; DB Pred. No. 7e-38;
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                                                                                                                                               stage;
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papillomavirus DNA
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RESULT 15
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       A LOCAL COLOR OF THE STREET COLOR CO
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This SWISS-PROT entry is copyright. It is produced through a copyrend the swiss institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and foentities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                 -!- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFF
STRANDED DNA (IN VITRO).
-!- SUBCELLULAR LOCATION: Nuclear matrix-associated
                                                                                                                                                                                                                                                                                                                                                                                    Ostrow R.S., Labresh K.V., Faras A.J.;
"Characterization of the complete RhPY 1 genomic integration locus from a metastatic tumor.";
Virology 181:424-429(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE=91135018; PubMed=1847267;
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NCBI_TaxID=10570;
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-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE STRANDED DNA (IN VITRO).
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A;Molecule type: DNA
A;Residues: I-158 <SEE>
A;Residues: I-158 <SEE>
A;Cross-references: GB:K02718; NID:g333031; PIDN:AAA46939.1; PID:g333032
R;Kennedy, I.M.; Haddow, J.K.; Clements, J.B.
J. Virol. 65, 2093-2097, 1991

type 16

genome acts at the

protein E6 - human papillomavirus type 16
C;Species: human papillomavirus type 16
C;Date: 28-May-1986 #sequence\_revision 28-May-1986 #text\_change
C;Accession: A03682; T10427
R;Seedorf, K.; Krammer, G.; Durst, M.; Suhai, S.; Rowekamp, W.G.
Virology 145, 181-185, 1985
A;Reference number: A22355; MUID:85246220; PMID:2990099
A;Accession: A03682

20-Aug-1999

45	44	43	42	41	40	39	38	37	36	3 5	34	33	32	31	30
145	146	148.5	150	150.5	150.5	154	155.5	156	170.5	182	252	257	284	289	300
17.0	17.2	17.5	17.6	17.7	17.7	18.1	18.3	18.3	20.0	21.4	29.6	30.2	33.4	34.0	35.3
166	156	207	157	141	139	161	140	156	141	138	152	148	150	150	142
Ν	ب	N	N	N	Н	N	Н	Н	2	Ŋ	N	Ŋ	Н	┙	ν
S36485	W6WL47	S28510	S36538	S36473	W6WLB2	S36491	W6WL	W6WL41	S36479	S36567	S36550	S36532	W6WL42	W6WL13	S36509
E6 protein	E6 protein	E6 protein	E6 protein	E6 protein	E6 protein	•	E6 protein	E6 protein	-	E6 protein	E6 protein	E6 protein	. E6 protein	E6 protein	E6 protein
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numan	numan	nulti	human	human	ovin	human	human	human	human	human	human	human	human	human	human

RESULT W6WLHS

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RESULT 2

MGWL35

E6 protein - human papillomavirus type :
C/Species: human papillomavirus type 35

A;Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                    C:Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc F;37-73/Region: zinc finger CCCC motif F;110-146/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:K02718; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Title: A negative element in the human poapillomavirus A; Reference number: Z17014; MUID:91162763; PMID:1848319 A; Accession: T10427
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A; Residues: 1-158 <KEN>
                                                                                                                                                                                                                                                                                                                                                                              A; Gene: E6
                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: preliminary; translated
                                                                                                                                                                                                                                                                              Query Match
Best Local 9
                                                                                                                                                                                                                                                                   Matches
                                                                                                 128
                                                                                                                           121
                                                                                                                                                      8
                                                                                                                                                                                                         KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                               KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                 150;
                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                              99.1%;
99.3%;
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                                                                                                                                                                                                                                                                              Score 843;
Pred. No. 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                  from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                   Mismatches
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3e-69;
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                                                                                                                                                                                                                                                                                          Length 158;
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A:Cross-references: EMBL:X74477; NID:g396997; PIDN:CAA52561.1; PID:g396998
A:Experimental source: strain 35H
C:Superfamily: papillomavirus E6 protein
C:Keywords: DNA binding; early protein; zinc finger
F:30-66/Region: zinc finger CCCC motif
F:103-139/Region: zinc finger CCCC motif
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submitted to the EMBL Data Library, August 1993
A:Description: Primer-directed sequencing of hun
A:Reference number: $36469
A:Accession: $36521
A:Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 23-Mar-2001 C;Accession: E40824; S35521 R;Marich, J.E.; Pootsler, A.V.; Rice, S.M.; McGraw, K.A.; Dubensky, T.W. virology 186, 770-776, 1992 Virology 186, 770-776, 1992 Virology 186, 770-776, 1992 Virology 186, 770-776, 1992 Virology 186, 700-776, 1992 Virology 186, 700-776
                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:J04353; NID:g333048; PIDN:AAA46950.1; PID:g459916 C;Comment: This protein may be involved in the oncogenic potential of this virus C;Superfamily: papillomavirus E6 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Goldsborough, M.D.; DiSilvestre, D.; Temple, G.F.; Lorincz, A.T. Virology 171, 306-311, 1989
A;Title: Nucleottide sequence of human papillomavirus type 31: a cervical neoplasia-assoc A;Reference number: A94398; MUID:89299478; PMID:2545036
A;Accession: A32444
A;Status: translation not shown
В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E6 protein - human papillomavirus type C; Species: human papillomavirus type 31 A; Note: host Homo sapiens (man)
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W6WL31
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F;30-66/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 16-J11-1999
C;Accession: A32444
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A; Residues: 1-149 <DEL>
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A; Residues: 1-149 <MAR>
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A; Residues: 1-149 <GOL>
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
        MFKNPAERPRKLHELSSALEIPYDELRLNCVYCKGQLTETEVLDFAFTDLTIVYRDDTPH
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Pred. No. 2.9e
14; Mismatches
                                                                                                                                                              Score 538; DB 1;
Pred. No. 2.1e-41;
8; Mismatches 32
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2.9e-46;
nes 27;
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MFQDAEEKPRTLHDLCQALETSVHEIELKCVECKKTLQRSEVYDFVFADLRIVYRDGNPF

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C; Accession: A03683
C; Accession: A03683
R; Cole, S.T.; Streeck, R.E.
J. Virol. 58, 991-995, 1986
A; Title: Genome organization and nucleotide
A; Title: Genome organization and nucleotide
                                                                                                                                                                                                                            A; Note: host Homo sapiens (man)
C; Date: 31-Mar-1992 #sequence_revision 31-i
C; Accession: B36779
R; Kirii, Y:; Iwamoto, S:; Matsukura, T.
Virology 185, 424-427, 1991
A; Title: Human papillomavirus type 58 DNA:
A; Reference number: A36779; MUID:92024102;
A; Accession: E36779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:M12732; NID:g333049; FC;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc F;30-66/Region: zinc finger CCCC motif F;103-139/Region: zinc finger CCCC motif
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W6WL58
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                                                                                                                C; Keywords: DNA binding; early protein; zinc F; 30-66/Region: zinc finger CCCC motif
                                                                                                                                               A;Cross-references: GB:D90400; NID:g222386; PIDN:BAA31845.1; PID:g3337098
C;Superfamily: papillomavirus E6 protein
                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-149 <KIR>
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                                                                                                 F;103-139/Region: zinc finger CCCC motif
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A; Residues: 1-149 <COL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                    Local
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                                   Similarity
95; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                     Conservative
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63.6%;
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type 58
                                     19;
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                                                    Pred.
                                                                   Score 516;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 534; DB 1;
Pred. No. 4.8e-41;
                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , 33
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                                                    No. 2e-39;
                                                                                                                                                                                                                                                  sequence.
; PMID:1656594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                149
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                                                                                                                                 finger
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                                                                   DB 1;
                                     35;
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                                     Indels
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PID:g396990

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Gaps

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122

62

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E6 protein - human papillomavirus type 52 C;Species: human papillomavirus type 52 C;Date: 12-May-1994 #sequence_revision 12-May-1994 #text_change 03-May-1996 C;Accession: A61237 R;Takami, Y.; Kondoh, G.; Saito, J.; Noda, K.; Sudiro, T.M.; Sjahrurachman, A.; Warsa, Int. J. Cancer 48, 516-522, 1991 A;Title: Cloning and characterization of human papillomavirus type 52 from cervical car A;Reference number: A61237; MUID:91258022; PMID:1646174 A;Accession: A61237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-148 <TAK>
C; Superfamily: papillomavirus E6 protein
                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:X74481; NID:g397038; PIDN:CAA52585.1; PID:g397039 C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                               R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E6 protein - human papillomavirus type 52 C;Speciles: human papillomavirus type 52 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S36573
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A;Accession: S36573
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                                                                  61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                                Local Similarity
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                                          GVCIMCLRFLSKISEYRHYQYSLYGKTLEERVKKPLSEITIRCIICQTPLCPEEKERHVN 120
                                                                                                                            MFEDPATRPRTLHELCEVLEESVHEIRLQCVQCKKELQRREVYKFLFTDLRIVYRDNNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MFEDPATRPRTLHELCEVLEESVHEIRLQCVQCKKELQRREVYKFLFTDLRIVYRDNNPY
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                                                                                                                                                                                                                              59.6%;
63.1%;
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                                                                                                                                                                                                           18;
                                                                                                                                                                                                         Score 507; DB 2; I
Pred. No. 1.3e-38;
8; Mismatches 34;
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Pred. No. 1.3e-38;
8; Mismatches 34;
                                                                                                                                                                                                                                                  Length 148
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C;Species: human papillomavirus type 51
A;Note: host Homo sapiens (man)
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 16-Feb-1997
C;Accession: E40415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Lungu, O.; Crum, C.P.; Silverstein, S.J.
J. Virol. 65, 4216-4225, 1991
A;Title: Biologic properties and nucleotide sequence analysis A;Reference number: A40415; MUID:91303675; PMID:1649326
A;Accession: E40415
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Delius, H.; Hofmann, B. submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human papillomavirus
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C;Species: human papillomavirus type 34
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:M62877
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding: early protein; zinc finger
E;30-66/Region: zinc finger CCCC motif
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A; Residues: 1-151 <LUN>
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A; Residues: 1-148 < DEL>
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                                                                                                                                                                                                                                                                                                           F;103-139/Region: zinc finger CCCC motif
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                                                              61
                                                                                                                                                                                                                                                  Local
                                                                                                                                             1 MFEDKRERPRTLHELCEALNVSMHNIQVVCVYCKKELCRADVYNVAFTEIKIVYRDNNPY
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                                                           AVCKQCLLFYSKIREYRRYSRSVYGTTLEAITKKSLYDLSIRCHRCQRPLGPEEKQKLVD
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61.1%;
                                                                                                                                                                                                                          55.7%; Score 474; DB 1; 57.0%; Pred. No. 1.2e-35; tive 25; Mismatches 40
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Pred. No. 6.7e-38;
.7; Mismatches 39
                       151
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human papillomavirus

Gaps

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RESULT 10

S36561

E6 protein - human papillomavirus type 45
C; Species: human papillomavirus type 45
C; Species: human papillomavirus type 45
C; Accession: S36561
R; Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A; Description: Primer-directed sequencing of human papillomavirus type:s.
A; Reference number: S36469
A; Accession: S36561
                                                                                                    C; Keywords: DNA bi
F; 32-68/Region: zi
F; 105-141/Region:
                                                                                                                                                               A;Cross-references: GB:X05015; NID:g60975; PIDN:CAA28664.1; PID:g60976 R;Matlashewski, G.; Banks, L.; Wu-Liao, J.; Spence, P.; Pim, D.; Crawfc J. Gen. Virol. 67, 1909-1916, 1986
A;Title: The expression of human papillomavirus type 18 E6 protein in ha;Reference number: A92791; MUID:8630665; PMID:3018129
A;Contents: annotation; identification of the protein C;Superfamily: papillomavirus E6 protein
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#6WL18

#6WL18

B6 protein - human papillomavirus type 18

C;Species: human papillomavirus type 18

C;Species: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change
C;Accession: A26165; G26251

C;Accession: A26165; G36251
                                                                                                                                                                                                                                                                                                                                                         R;Cole, S.T.; Danos, O.
J. Mol. Biol. 193, 599-608, 1987
A;Title: Nucleotide sequence and comparative analysis of the A;Reference number: A92937; MUID:87283882; PMID:3039146
A;Accession: G26251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Seedorf, K.; Oltersdorf, T.; Kraemmer, G.; Roewekamp, W. EMBO J. 6, 139-144, 1987
A;Title: Identification of early proteins of the human papilloma A;Reference number: A91068; MUID:87218459; PMID:3034571
A;Accession: A26165
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A; Residues: 1-158 <CDEL>
A; Cross-references: EMBL:X74479; NID:g397022; PIDN:CAA52573.1;
C; Superfamily: papillomavirus E6 protein; nucleus; zinc finger
C; Keywords: DNA binding; early protein; nucleus; zinc finger
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A; Residues: 1-158 <COL>
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R;Cole, S.T.; Danos, O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-158 <SEE>
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                                                                                                                          ;Keywords: DNA binding; early protein; transforming protein; zinc finger; 32-68/Region: zinc finger CCCC motif
                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KQRFHNIRGRWTGRCMSCCRSS----RTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FODPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KRRFHSIAGQYRGQCNTCCDQARQERLRRRRETQV 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACHKCIDFYSRIRELRYYSNSVYGETLEKITNTELYNLLIRCLRCQKPLNPAEKRRHLKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FDDPKQRPYKLPDLCTELNTSLQDVSIACVYCKATLERTEVYQFAFKDLCIVYRDCIAYA 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EKKRFHEIAGRWTGQCANCWQRTRQRNETQV 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                     Conservative
                                                                                                        zinc
                                                                                                    finger cccc
                                     55.2%;
56.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 55.6%;
56.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23;
                     22;
                                     Score 469.5; DB 1
Pred. No. 3.2e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 473.5; DB 2
Pred. No. 1.4e-35;
23; Mismatches 4(
                     Mismatches
                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40;
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                   Indels
                                                           Length
                                                                                                                                                                                                                               E6 protein in bacteria and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PID:g608?7
                                                                                                                                                                                                                                                                                                                                                                                                   human papillomavirus
                                                           158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PID: 9397023
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         viruses
                   5,
                                                                                                                                                                                                                                                                          Crawford,
                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                   type
                                                                                                                                                                                                                                 the
                              C;Keywords: DNA binding; early protein; transforming F;32-68/Region: zinc finger CCCC motif F;105-141/Region: zinc finger CCCC motif
                                                                                                A; Molecule type: DNA
A; Residues: 1-158 < VOL>
A; Cross-references: GB: M62849; EMBL: M38185;
C; Superfamily: papillomavirus E6 protein
                                                                                                                                                                    A;Reference number: A38502; MUID:91135017; PMID:1847266 A;Accession: A38502 A;Status: translattion not shown A;Molecule type: NMX
                                                                                                                                                                                                                                              R; Volpers, C.; Streeck, R.E. Virology 181, 419-423, 1991 A; Title: Genome organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc F;32-68/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                   A; Note: host Homo sapiens (man)
C; Date: 31-Dec-1991 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                             E6 protein - human papillomavirus type C; Species: human papillomavirus type 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-158 < REU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: A40509; MUID:91374616; A; Accession: C40509
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E6 protein
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Query Match
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 KKORFHNIRGRWTGRCMSCCRSS-----RTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRRFHKIAGNFTGQCRHCWTSKREDRRRTRQETQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KQRFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human papillomavirus type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  54.7%;
55.1%;
54.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 465.5; DB 1
Pred. No. 7.3e-35;
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Score 463.5;
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DΒ
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C;Species: human papillomavirus type ME180
A;Note: host Homo sapiens (man)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 16-Feb-1997
C;Accession: C40509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Reuter, S.; Delius, H.; Kahn, T.; Hofmann, B.; zur Hausen, H.; Schwarz, E. J. Virol. 65, 554-5568, 1991
A;Title: Characterization of a novel human papillomavirus DNA in the cervical carcino A;Reference number: A40509; MUID:91374616; PMID:1716694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 LFHNPEERPYKLPDLCRTLDTTLHDVTIDCVYCRRQLQRTEVYEFAFGDLNVVYRDGVPL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-Dec-1991 #text_change 16-Jul-1999
                                                                                                                                                                          NID: g333245; PIDN: AAA47050.1;
                                                                                                             protein;
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Length 158;
                                                                                                                                                                                                                                                                                                                                                    human papillomavirus
                                                                                                                   zinc
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                                                                                                                                                                             PID: 9463186
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W6WLR1
W6WLR1
W6WLR1
E6 protein - rhesus papillomavirus (type 1)
C;Species: rhesus papillomavirus
C;Species: rhesus papillomavirus
C;Apecies: nesus papillomavirus
C;Apecies: 11-Dec-1991 #sequence_revision 31-Dec:1991 #text_change 16-Feb-1997
C;Accession: A38503
R;Ostrow, R.S.; LaBresh, K.V.; Faras, A.J.
Virology 181, 424-429, 1991
A;Title: Characterization of the complete RhPV 1 genomic sequence and an integration loc A;Title: Characterization of the complete RhPV 1 genomic sequence and an integration loc A;Reference number: A38503; MUID:91135018; PMID:1847267
A;Accession: A38503
A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-191 <OST>
A;Cross-references: EMBL:M37717
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; transforming protein; zinc finger
F;60-96/Region: zinc finger CCCC motif
F;133-169/Region: zinc finger CCCC motif
                                                                                      RESULT 15
$36544

$36544

E6 protein - human papillomavirus type 26
C:Species: human papillomavirus type 26
C:Species: human papillomavirus type 26
C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
C:Accession: $36544
R:Delius, H:, Hofmann, B.
submitted to the EMBL Data Library, August 1993
A:Description: Primer-directed sequencing of human papillomavirus types.
A:Reference number: $36469
A:Accession: $36544
A;Molecule type: DNA
A;Residues: 1-150 <DEL>
A;Cross-references: EMBL:X74472; NID:g396956; PIDN:CAA52530.1; PID:g396957
C;Superfamily: papillomavirus E6 protein
C;Keywords: early protein; zinc finger
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  Query Match 52.9%; Sometime 55.0%; Pure Matches 83; Conservative 25;
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Matches 86; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DPQERPRKLPQLCTELQTTIHDIILECYYCKQQLLRREVYDFAFRDLCIYYRDGNPYAVC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RFHNIRGRWTGRCMSCCRSSRTRRETQ 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PICLRFYSKIRKYRRYEYSIYGCTLERRTRKQLVEVLIRCYCCQKPLCPIEKQRHVDQGQ 153
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  Score 450.5; DB 2;
Pred. No. 1.6e-33;
5; Mismatches 42;
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Search completed: December 13, 2002, 08:40:10 Job time : 24.0859 secs

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